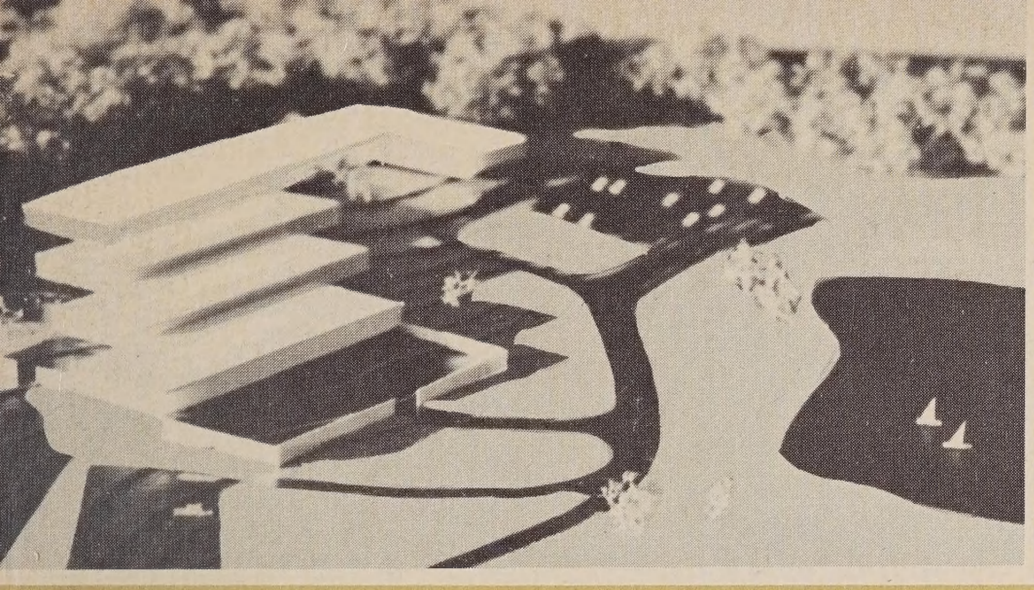

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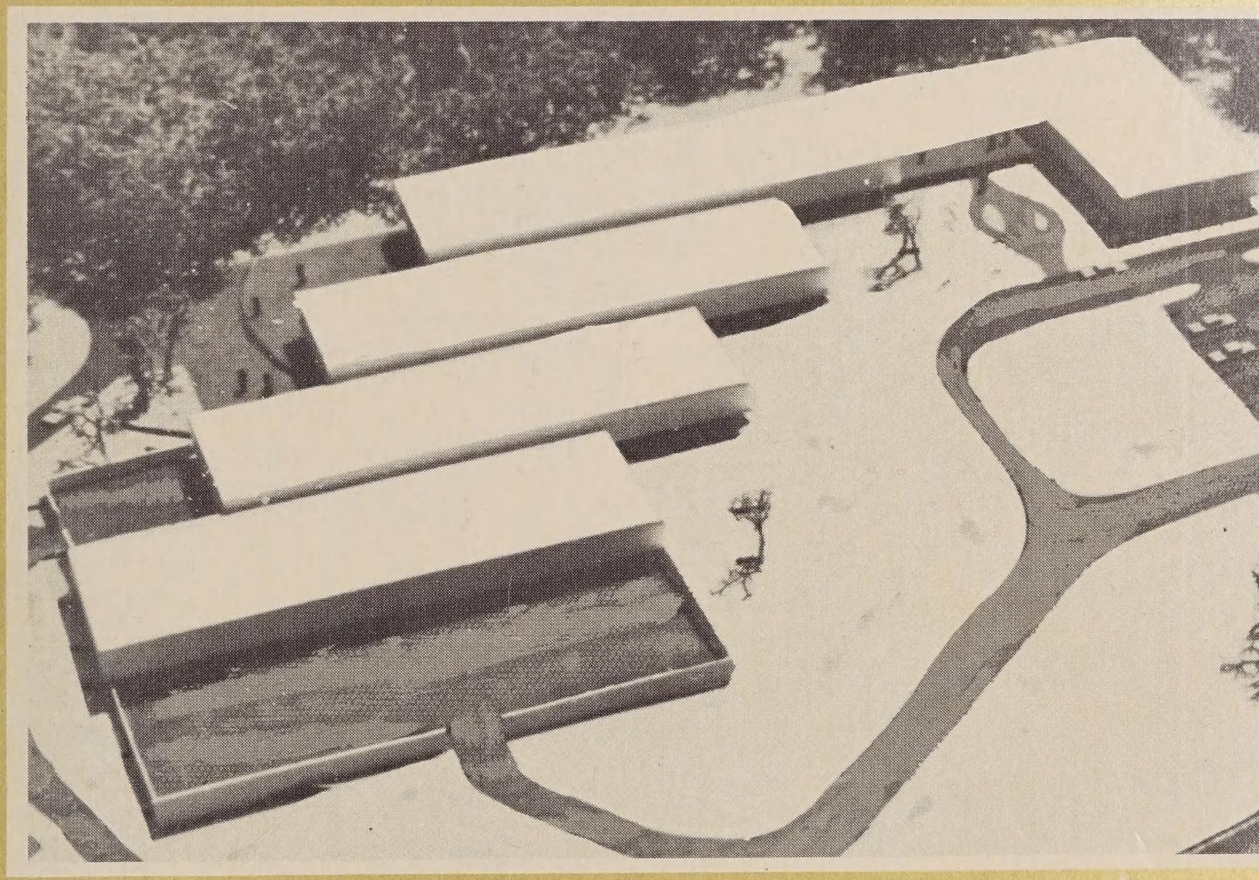

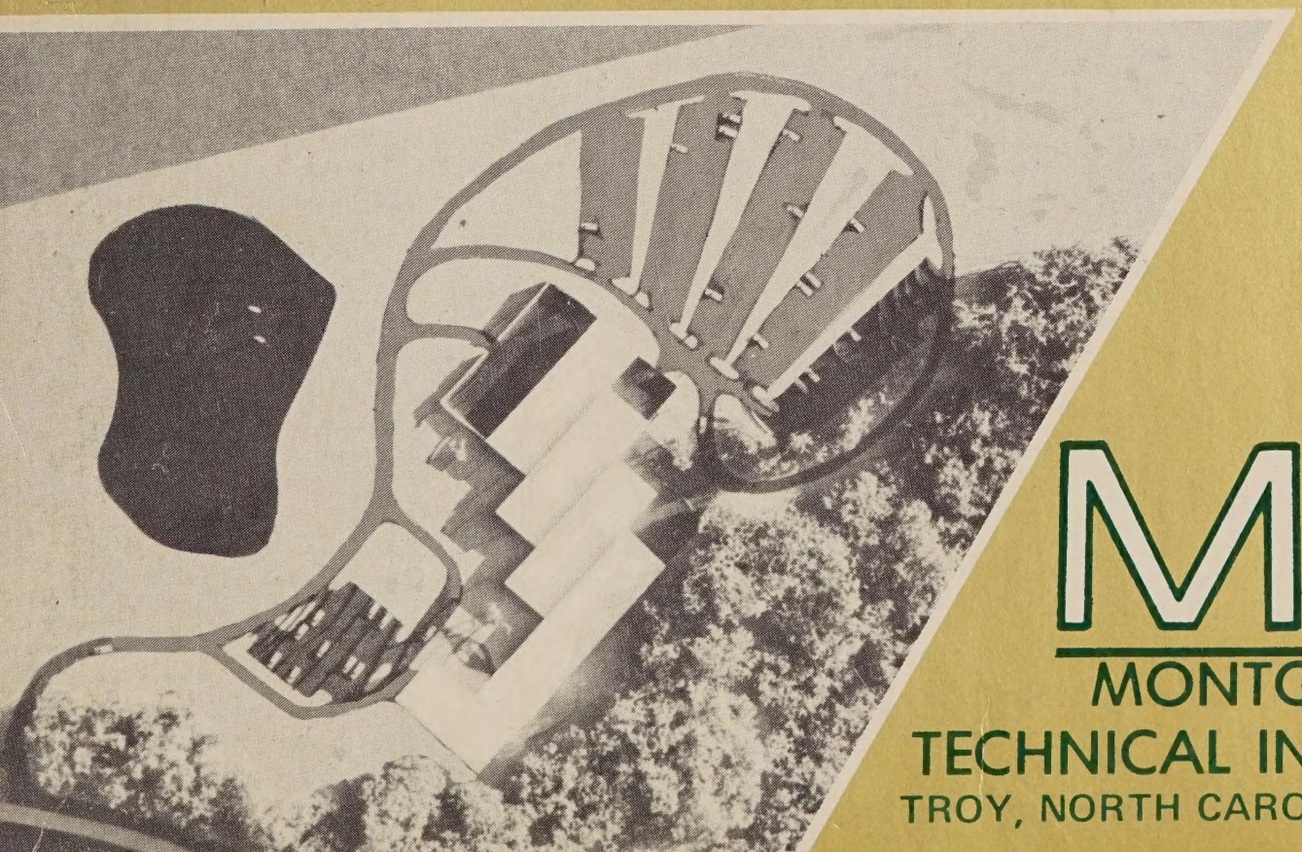

MTI

MONTGOMERY
TECHNICAL INSTITUTE
TROY, NORTH CAROLINA 27371

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A Message From The President

The motto of Montgomery Technical Institute is "Dedicated to the community we serve." Embodied in this motto is our realization of the supreme worth of the individual. Philosophically, this means that through the educational process, every individual should be given the opportunity to develop to his maximum potential. Practically, for the staff and faculty of MTI, this means providing low cost, quality education under an "open door" policy which denies no one.

Foremost among the educational objectives of Montgomery Technical Institute is the express intent to prepare its students for life-long success. Our approach to this results in a continual upgrading of technical and vocational curricula to realistically prepare the student for successful transition into our present industrial community.

In the selection of our faculty and staff, we attempt to combine the best in academic, industrial and professional experience. Our facilities house equipment designed to prepare the student for an era which is characterized by rapid change and highly advanced technology.

Montgomery Technical Institute is here to serve you, and in that spirit you are cordially invited to come in and plan a technical or vocational education designed to meet your specific needs.

Cordially,

Marvin G. Miles
President

"An Equal Opportunity Education Institution"

State Community College Open Door Policy

The only valid philosophy for North Carolina is the philosophy of total education; a belief in the incomparable worth of all human beings, whose claims upon the state are equal before the law and equal before the bar of public opinion; whose talents, (however great or however limited or however different from the traditional), the state needs and must develop to the fullest possible degree. That is why the doors to the institutions in North Carolina's system of Community Colleges must never be closed to anyone of suitable age who can learn what they teach. We must take the people where they are and carry them as far as they can go within the assigned function of the system. If they cannot read, then we will simply teach them to read and make them proud of their achievement. If they did not finish high school, but have a mind to do it, then we will offer them a high school education at a time and a place convenient to them and at a price within their reach. If their talent is technical or vocational, then we will simply offer them instruction, whatever the field, however complex or however simple, that will provide them with the knowledge and the skill they can sell in the market-places of our state, and thereby contribute to its scientific and industrial growth. If their needs are in the great tradition or liberal education, then we will simply provide them the instruction, extending through two years of standard college work, which will enable them to go on to the University or to senior college and on into life in numbers unheard of before in North Carolina. If their needs are for cultural advancement, intellectual growth, or civic understanding, then we will simply make available to them the wisdom of the ages and the enlightenment of our own times and help them on to maturity.

W.D. Herring, Chairman
State Board of Education
1964

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CALENDAR

	1975-1976	1976-1977	1977-1978
	FALL QUARTER	FALL QUARTER	FALL QUARTER
Registration	September 9	September 7	September 5
Classes Begin	September 11	September 9	September 7
Classes End	November 21	November 19	November 17
Exams	November 24-25-26	November 22-23-24	November 18-21-22
	WINTER QUARTER	WINTER QUARTER	WINTER QUARTER
Registration	December 1	November 29	November 28
Classes Begin	December 2	November 30	November 29
Christmas	December 19*	December 17*	December 16*
Holidays	January 5**	January 3**	January 2**
Classes End	February 25	February 23	February 22**
Exams	February 26-March 1	February 24-25-28	February 23-24-27
	SPRING QUARTER	SPRING QUARTER	SPRING QUARTER
Registration	March 8	March 7	March 6
Classes Begin	March 9	March 8	March 7
Easter	April 15*	April 7*	March 23*
Holidays	April 26**	April 18**	April 3**
Classes End	May 27	May 26	May 25
Exams	May 28-31-June 1	May 27-30-31	May 26-29-30
	SUMMER QUARTER	SUMMER QUARTER	SUMMER QUARTER
Registration	June 4	June 3	June 1
Classes Begin	June 7	June 6	June 2
Independence	July 2*	July 1*	June 30*
Holidays	July 12**	July 11**	July 10**
Classes End	August 24	August 23	August 21
Exams	August 25-26-27	August 24-25-26	August 22-23-24
Graduation	August 29	August 28	August 27

* Last day of classes before holiday
**First class day following holiday

GENERAL INFORMATION

HISTORY

The Montgomery Technical Institute was established in 1967. It is one of fifty-seven such institutes operated by the North Carolina State Board of Education under the direction of the Department of Community Colleges in Raleigh, and is administered by a local Board of Trustees. Authority for the establishment and operation of these institutions is found in chapter 115A of the General Statutes of North Carolina and the amendments thereto.

PURPOSE

The purpose of Montgomery Technical Institute is to serve the educational needs of those people in Montgomery County and the surrounding areas that are 18 years old and older. Offering in the areas of Adult Basic Education, Adult High School Education, Degree Programs in Technical Education, Diploma Programs in Vocational Education, varied programs of Continuing Education and Special Programs for Special Needs are the primary concern of Montgomery Technical Institute.

The aim of these programs is to aid the students to become more useful members of the industrial - business community and the Socio-Political society in which we live. This is to be accomplished within the assigned function of the North Carolina Community College System.

ACCREDITATION

Montgomery Technical Institute is a member of the North Carolina Community College System and operates under the authority of a local Board of Trustees and the State Board of Education, as specified in chapter 115A of the General Statutes of North Carolina and Amendment thereto. All programs offered by the Institute have been officially approved by the North Carolina State Board of Education, by the Veterans Administration and by the North Carolina Department of Vocational Rehabilitation. The Practical Nursing Program is fully approved by the North Carolina Board of Nursing.

AREAS OF STUDY

Associate in Applied Science Degree Programs:

Business Administration
Executive Secretarial Science
Educational Specialist
Early Childhood Specialist
Law Enforcement: Criminal Justice & Protective Services

Diploma Programs:

Air Conditioning & Refrigeration
Auto Body Repair
Automotive Mechanics
Electrical Installation & Maintenance
Industrial Maintenance
Licensed Practical Nursing
Light Construction
Pottery Production
Radio & Television Servicing
Sheet Metal Specialist
Small Engines & Equipment Repair
Upholstery
Welding

Technical Speciality:

Nurses' Assistant
Structural Machinist
Upholstery

Continuing Education Programs

Individualized Instructional Center Program

Human Resources Development Program

Adult Basic Education Program

Adult High School Diploma Program

ADMISSIONS TO FULL-TIME CURRICULUM PROGRAMS

This Institute follows the "Open Door" policy established by the State Board of Education to offer occupational and adult education to all persons able to profit from instruction and who are 18 years old or older, or whose high school class has graduated. The "Open Door" policy does not mean there aren't restrictions on admissions to specific programs. Special admission requirements including educational qualification, physical abilities and test scores may be required in certain curriculum to help increase the probability of successful completion. Applicants with educational deficiencies will be advised to consider alternate programs or to eliminate deficiencies through additional preparational work.

1. Application-Each applicant must submit a completed Montgomery Technical Institute Student Application form to the Institute's Student Services Office. An application form is included in the back of the catalogue. Additional applications are available from the Institute or your guidance counselor.

2. Previous Education-Each applicant shall request his or her high school to submit a transcript showing work completed. Those who are high school seniors should have their school submit a transcript showing work through the first semester of the senior year as soon as possible after the semester has ended, and a supplementary transcript showing graduation at the close of school.

Applicants who have the high school equivalency certificate should submit a copy of the official transcript or certificate. Applicants wishing to transfer credits from another institution of higher education must submit a transcript of their work before any evaluation toward credit can be made. No grade less than a C will be acceptable for transfer credit. All courses will be evaluated on their own merit and relevance.

3. Testing-Applicants to certain curriculum programs may be required to take an admissions test to aid in determining his readiness to enter.

Advanced placement tests are given for specific courses in certain curriculums. These tests are administered by the course instructor at the beginning of the course. Students who drop below full-time status due to advanced placement will be given full credit for tuition the following quarter in the amount applicable.

4. Health-A person must be in an acceptable condition of physical and mental health to be admitted. A medical checklist will be required.

5. Personal Interview-The personal interview is beneficial to both the applicant and to school officials in that it affords an opportunity to "get acquainted." The applicant has an opportunity to ask questions about the school and its programs while school officials make an effort to evaluate the applicant's interest in, and capability to pursue the program of study applied for.

6. Out-of-state and foreign students are admitted under the same regulation as others. Tuition and fees are established by the State Board of Education.

See the curriculum section to obtain information for the admission requirements of a specific curriculum.

SPECIAL STUDENTS

Students who are not registered as full-time students in technical and vocational programs are classified as special students. Admission requirements may differ from those of regular students. For admission requirements, contact the Director of Student Services Office.

RE-ADMISSION

When a student withdraws in good standing, he may re-enter at the beginning of a quarter which offers courses for which he is eligible. If a student is dismissed not in good standing, application for readmission must be made to the Director of Student Services. The decision for re-admission will be made by a committee composed of the advisor for the student and members of the administrative staff.

REGISTRATION

Students who have been admitted will register with the Director of Student Services on the dates set by the school for this purpose.

ORIENTATION

There will be an orientation session for all new full-time students during the first week of the fall quarter.

CORRESPONDENCE

All correspondence concerning enrollment or registration should be addressed to: Director of Student Services, Montgomery Technical Institute, P.O. Box 487, Troy, N.C. 27371.

STUDENT RESPONSIBILITIES

CONDUCT

Students will be expected to conduct themselves at all times as individuals of prudence and maturity. The rights and feelings of others will be respected. Students shall demonstrate a high regard for school facilities and property and for the personal property of others.

ATTENDANCE

Students are expected to attend all scheduled classes for which they are registered. Although special circumstances may cause a student to be absent, regular attendance is essential to satisfy regular course objectives.

All absences will be evaluated by the instructor of the class which the student has missed. Individual instructors will determine whether absences are excused or unexcused.

Students who anticipate an absence should contact their instructor before the class meets. Should this prior notice to the instructor be impossible, the student should expect to explain his absence upon his return to class.

All work missed during absences must be made up. Failure to make up work which is missed will adversely affect the student's final grade for the course. To **receive credit** for a course, **a student should attend 80 percent of class and 80 percent of lab hours.**

ACADEMIC PROBATION

The probation policy is designed to give the student every possible opportunity to be successful in his or her training program.

Sub-minimum work in any quarter will result in probationary attendance in the next quarter. Sub-minimum work in two consecutive quarters will be cause for possible re-alignment of academic work and may result in assignment to a developmental studies program.

STUDENT RESPONSIBILITIES

WITHDRAWAL FROM SCHOOL

Should it become necessary for a student to withdraw from school during the school year, a request to do so must be made to the Student Services Office. Written permission will be issued from the Student Services Office and will protect the student's scholastic records and his right to re-enroll and transfer credits.

WITHDRAWAL FROM CLASS

Should it become necessary to withdraw from a class, permission must be obtained from the Student's Advisor or the Student Services Office, and the necessary Drop-Add Form be completed.

GRADING SYSTEM

A letter grade is used to indicate the quality of a student's work in a course. Grade points are assigned for each letter so that a grade-point average can be calculated. The grading system is as follows:

GRADE	EXPLANATION	GRADE POINTS PER CREDIT
A (93-100)	Excellent	4
B (86-92)	Above Average	3
C (78-85)	Average	2
D (70-77)	Passing	1
F (Below 70)	Failure	0
I	Incomplete	--
WP	Withdrew Passing	--
WF	Withdrew Failing	--
CR	Credit-By Previous Training or Placement Exam	--

Incomplete will be given when circumstances justify additional time to complete the course. Any incomplete not removed by the end of the succeeding quarter will be changed to an F, unless additional time is granted by the instructor. If a student received an F in any particular course, they must repeat that course and obtain a passing grade before the F can be removed from the transcript. Students wishing to retake a course to raise his grade may do so. The higher of the two marks will be recorded.

REPORT CARDS

Returning students' report cards may be picked up at the Student Services Office during registration or on the first day of classes the following quarter. Report cards will be mailed to all students not returning for another quarter or at the end of the school year.

STUDENT GOVERNMENT ASSOCIATION

The Student Government Association of Montgomery Technical Institute is the official governing agency representing the students. S.G.A. objectives are:

A. To promote mutual goodwill and understanding between the student body and the officials of Montgomery Technical Institute.

B. To further, support, and protect the interests of Montgomery Technical Institute.

C. To act as representatives of and ambassadors for Montgomery Technical Institute from the student body.

D. To encourage student participation in school functions, both formal and informal.

Election of officers of the S.G.A. takes place not later than twenty (20) academic days of the first full school day of the fall quarter. All officers of the Executive Council of the S.G.A. are elected by the student body. All officers hold office from inauguration to inauguration.

FINANCIAL INFORMATION

Expenses

The only costs in addition to tuition, accident insurance, and the student activity fee are textbook and supplies which will vary in price with the quarter depending on the curriculum the student follows.

Tuition In-State

Currently, tuition for full-time North Carolina resident students in technical or vocational programs is $33.00 per quarter. Students taking less than 12 quarter hours credit will pay $2.75 per quarter hour credit.

Tuition Out-of-State

Any student whose legal residence is outside of North Carolina, or, in the case of students who are boarding or living with relatives in the community, whose parents or guardians living outside the State, shall pay tuition fees as follows: $550 per school year of twelve months, or $137.50 per quarter, or--if a part-time student--$11.45 per quarter credit hour.

Residence Status For Tuition Payment

The tuition charge for legal residents of North Carolina is less than for nonresidents. To qualify for in-state tuition, a legal resident must have maintained his domicile in North Carolina for at least the twelve months next preceding the date of first enrollment or re-enrollment in an institution of higher education in this state.

Insurance

All students are expected to purchase accident insurance; this insurance presently costs $3.00 per year.

Activity Fee

Each full-time student shall pay a $2.00 per quarter activity fee which will be used to support the Student Activities Program. Payment of the activity fee is optional for part-time students who have successfully completed 9 credit hours.

Graduation Fee

A mandatory graduation fee of $10.00 is charged to all graduating students. This fee is payable when the student registers for his last quarter.

Payments

All tuition charges shall be paid in full on registration day. In hardship cases, monthly payments may be permitted when approved by the Business Manager.

No student will be permitted to graduate, nor will a transcript be issued until all financial obligations to the Institute are satisfied.

Refunds

Tuition refund for students shall not be made unless the student is, in the judgment of the institution, compelled to withdraw for unavoidable reasons. In such cases, two-thirds (2/3) of the student's tuition may be refunded if the student withdraws within ten (10) calendar days after the first day of classes as published in the school calendar. Tuition refunds will not be considered after that time. Tuition refunds will not be considered for tuition of five dollars ($5.00) or less, except if a course or curriculum fails to materialize, all the students' tuitions shall be refunded.

SPECIAL PROGRAM EXPENSES

The following expenses are mandatory for all nursing assistant students:

Shoes	$20 (approximately)
Uniform	20 (approximately)
Watch with second hand	15 (approximately)
Name tag	2 (approximately)
Scissors	4 (approximately)

The following expenses are mandatory for all Licensed Practical Nurse students:

Shoes	$20
Uniform	20
Watch with second hand	15
Name tag	2
Scissors	4
Nurse's Pin	20
State Board Exam	20

The following items are optional for Vocational students to purchase:

Air Conditioning & Refrigeration supplies & tools	$150
Automotive Body Repair supplies & tools	150
Automotive Mechanics supplies & tools	150
Electrical Installation & Maintenance supplies & tools	90
Carpentry supplies & tools	150
Radio & TV Servicing supplies & tools	150
Sheet Metal Specialist supplies & tools	150
Small Engines & Equipment Repair supplies & tools	150
Upholstery supplies & tools	150
Welding supplies & tools	150

STUDENT PERSONNEL SERVICES

COUNSELING

The counseling service provides professional assistance to help students assess and understand their abilities, aptitudes, interest, and personality characteristics. Information is made available concerning local, state, and national job opportunities, and assistance is provided to help students utilize this information in making career decisions. As tentative career goals are established, the counselor is able to help students plan courses of study which will facilitate the achievement of long-range goals. In addition to vocational and educational counseling, the counselor is prepared to assist students in working through personal and social concerns.

DEVELOPMENTAL EDUCATION

Developmental education is a service to those students at Montgomery Technical Institute who need academic aid. This aid will be provided on an individualized basis. Content areas will be determined by student need.

Students may be referred to this service by the instructor or counselor; however, students are encouraged to initiate requests. Requests or referrals should be directed to the Supervisor of the Individualized Instructional Center.

PLACEMENT SERVICES

Every effort is made by school officials to help students find employment, and to secure employees from graduates of the Institute for interested employers. This is not to imply that the school guarantees employment to any student or employees to any employer. There shall be no charge to industry nor to students for this placement service.

FINANCIAL AID

Limited financial aid is available through gifts or loan funds provided by individuals or civic groups. Also, some aid is available through the state and federal programs. Inquiries concerning financial aid should be addressed to the Director of Student Services.

TYPES OF AID AVAILABLE

VETERANS
SCHOLARSHIPS
VOCATIONAL REHABILITATION
GRANTS
STUDENT EMPLOYMENT
INTEREST FREE LOANS
CETA
SOCIAL SECURITY
COLLEGE WORK STUDY
ADULT WORK EXPERIENCE

VETERANS AFFAIRS

All programs being offered by the Institute at this time are approved for training under the so-called "Cold War G.I. Bill." Veterans desiring to train under the benefits of this bill must first establish their eligibility with the Veterans Administration. In general, Veterans who served in the Armed Forces since January 31, 1955, and who were discharged under conditions other than dishonorable, qualify for training under the bill. The amount of training permitted is determined by the number of months of service. Certain servicemen on active duty are also eligible for schooling under this bill. Interested servicemen should contact their Education Officer.

Veterans are admitted under the same admission requirements as other students. They pay tuition and attend school under the same regulations as others. The Institute maintains a written record of previous education and training of veterans and clearly indicates that appropriate credit has been given by the Institute for previous education and training, with the training period shortened proportionately and the Veterans Administration so notified. The only difference between Veterans and other students is that they are paid monthly by the Veterans Administration, an amount determined by the hours attended and the number of dependents.

To be classified as a full-time student, a veteran must be attempting 12 credit hours per quarter in a technical program, or 30 clock hours per week in a trade program.

Full details on Veterans training programs may be obtained from any Veterans Service Office.

The contact hours shown in the catalog are minimal. It is a policy of this institution to permit students to enroll in additional subjects and laboratory work beyond those shown in the catalog.

When in any quarter the hours listed are fewer than 12 credit hours per quarter in a technical curriculum and fewer than thirty clock hours per week in a vocational trade curriculum, a student may enroll on request for additional instructional hours deemed by the institution to be consistent with the program and appropriate to the student to make up thirty hours per week in a vocational trade curriculum or 12 credit hours per week in a technical curriculum.

REQUIREMENTS FOR GRADUATION

In order to qualify for graduation from Montgomery Technical Institute a student must:

(1) Complete the prescribed courses to meet the minimum number of credit hours required for a degree, diploma, or certificate;
(2) Have sufficient quality points for an overall 2.0 average (C);
(3) Remove all financial obligations to MTI.

The minimum quarter credit hours required for graduation from each individual curriculum is as follows:

Technical Curricula		Quarter Hours Credit
Business Administration	Required courses	68
	General education courses	34
		102
Executive Secretarial Science	Required courses	75
	General education courses	25
		100
Educational Specialist	Required courses	76
	General education courses	37
		113
Early Childhood Specialist	Required courses	72
	General education courses	28
		100
Child Care Diploma	Required courses	30
	General education courses	24
		54
Law Enforcement:	Required courses	70
Criminal Justice	General education courses	32
Protective Custody		102

The requirements listed are relevant for the present circumstances in each curriculum area. However, the faculty and administration of the institute reserve the right to modify current courses or to develop new courses as the need arises. These changes may alter total credit hours for graduation.

Vocational Curricula		Quarter Hours Credit
Air Conditioning and Refrigeration	Required courses	50
	Related courses	23
		73
Auto Body Repair	Required courses	48
	Related courses	23
		71
Auto Mechanics I	Required courses	49
	Related courses	23
		72
Auto Mechanics II	Required courses	96
	Related courses	23
		119
Electrical Installation and Maintenance	Required courses	45
	Related courses	23
		68
Industrial Maintenance	Required courses	50
	Related courses	23
		73
Light Construction	Required courses	50
	Related courses	23
		73
Licensed Practical Nurse	Required courses	86
Pottery Production	Required courses	60
Radio and Television Servicing	Required courses	56
	Related courses	23
		79
Sheet Metal Specialist	Required courses	42
	Related courses	23
		65
Small Engines and Equipment Repair	Required courses	51
	Related courses	10
		61

Upholstery	Required courses	40
	Related courses	23
		63
Welding	Required courses	43
	Related courses	23
		66

Technical Specialties

Nurses' Assistant Practical Structural Machinist Upholstery	Required contact hours	330

CURRICULUM PROGRAMS LEADING TO DEGREES, DIPLOMAS, AND CERTIFICATES

TECHNICAL PROGRAMS

Business Administration
Executive Secretarial Science
Early Childhood Specialist
Education Specialist
Law Enforcement: Criminal Justice and Protective Services

VOCATIONAL PROGRAMS

Air Conditioning and Refrigeration
Automotive Body Repair
Automotive Mechanics
Electrical Installation — Maintenance
Industrial Maintenance
Licensed Practical Nursing
Light Construction
Pottery Production
Radio and Television Repair
Sheet Metal Specialist
Small Engines and Equipment Repair
Upholstery
Welding

TECHNICAL SPECIALTIES

Nurses' Assistant
Structural Machinist
Upholstery

TECHNICAL EDUCATION

BUSINESS ADMINISTRATION
EXECUTIVE
SECRETARIAL SCIENCE
EARLY CHILDHOOD SPECIALIST
EDUCATIONAL SPECIALIST

LAW ENFORCEMENT: CRIMINAL JUSTICE AND PROTECTIVE SERVICES

GENERAL INFORMATION for TECHNICAL PROGRAMS

Degree:

Associate Of Applied Science

Admission:

To Enter The Technical Degree Program, The Prospective Student Must Be A High School Graduate Or Hold A GED Certificate That Meets North Carolina Standards.

Additionally, The Prospective Student Must Complete A School Administered Admissions Examination.

BUSINESS ADMINISTRATION

In North Carolina the opportunities in business are increasing. With the increasing population and industrial development in this State, business has become more competitive and automated. Better opportunities in business will be filled by students with specialized education beyond the high school level. The Business Administration Curriculum is designed to prepare the student for employment in one of many occupations common to business. Training is aimed at preparing the student in many phases of adminstrative work that might be encountered in the average business.

The graduate of the Business Administration Curriculum may enter a variety of career opportunities from beginning sales person or office clerk to manager trainee. The duties and responsibilities of this graduate vary in different firms. These encompassments might include: making up and filing reports, tabulating and posting data in various books, sending out bills, checking calculations, adjusting complaints, operating various office machines, and assisting managers in supervision. Positions are available in businesses such as advertising, banking, credit, finance, retailing, wholesale, hotel, tourist and travel industry, insurance, transportation and communications.

Other options in Business Administration are available to students who wish to specialize in industrial or textile management.

A degree in Business Administration may be obtained by attending classes full time during the day or in the evening.

BUSINESS ADMINISTRATION (DAY)

FIRST QUARTER

			Class	Lab	Credit Hrs.
*T-ENG	101	Grammar & Composition	5	0	5
T-BUS	101	Introduction to Business	5	0	5
*T-MAT	110	Business Math	5	0	5
T-BUS	102	Beginning Typing	2	3	3
			17	3	18

SECOND QUARTER

T-EDP	104	Introduction to Data Processing	3	0	3
*E-ENG	204	Effective Speaking	5	0	5
T-BUS	115	Business Law I	3	0	3
*T-ECO	102	Economics I	5	0	5
T-BUS	103	Intermediate Typing	2	3	3
			18	3	19

THIRD QUARTER

T-BUS	110	Business Machines	2	3	3
T-BUS	116	Business Law II	3	0	3
*T-ECO	104	Economics II	5	0	5
T-BUS	272	Prin. of Supervision	3	0	3
			13	3	14

FOURTH QUARTER

T-BUS	120	Beginning Accounting	5	0	5
T-BUS	233	Personnel Management	3	0	3
T-BUS	229	Taxes	5	0	5
*T-PSY	206	Applied Psychology	3	0	3
			16	0	16

FIFTH QUARTER

T-BUS	121	Intermediate Accounting	5	0	5
T-BUS	239	Marketing	5	0	5
T-BUS	247	Business Insurance	3	0	3
T-BUS	123	Business Finance	3	0	3
			16	0	16

SIXTH QUARTER

T-BUS	122	Advanced Accounting	5	0	5
T-ISC	213	Production Planning	3	0	3
*T-MAT	115	Metric System	3	0	3
T-BUS	206	Business Communication	5	0	5
*		Elective	3	0	3
			19	0	19

* General Education Course

BUSINESS ADMINISTRATION (NIGHT)

			Class	Lab	Credit Hrs.
FIRST QUARTER					
T-BUS	102	Beginning Typing	2	3	3
T-BUS	101	Introduction to Business	5	0	5
*T-ENG	101	Grammar & Composition	5	0	5
			12	3	13
SECOND QUARTER					
T-BUS	103	Intermediate Typing	2	3	3
*T-ENG	204	Effective Speaking	5	0	5
*T-ECO	102	Economics I	5	0	5
			12	3	13
THIRD QUARTER					
*T-ECO	104	Economics II	5	0	5
T-BUS	110	Business Machines	2	3	3
*T-MAT	110	Business Math	5	0	5
			12	3	13
FOURTH QUARTER					
T-BUS	120	Beginning Accounting	5	0	5
T-BUS	229	Taxes	5	0	5
*T-MAT	115	Metric System	3	0	3
			13	0	13
FIFTH QUARTER					
T-BUS	121	Intermediate Accounting	5	0	5
T-BUS	239	Marketing	5	0	5
T-BUS	115	Business Law I	3	0	3
			13	0	13
SIXTH QUARTER					
T-BUS	122	Advanced Accounting	5	0	5
T-BUS	206	Business Communications	5	0	5
T-BUS	116	Business Law II	3	0	3
			13	0	13
SEVENTH QUARTER					
T-BUS	272	Principles of Supervision	3	0	3
T-EDP	204	Intro. to Data Processing	3	0	3
*T-PSY	206	Applied Psychology	3	0	3
T-BUS	247	Business Insurance	3	0	3
			12	0	12

BUSINESS ADMINISTRATION

(continued)

EIGHTH QUARTER			Class	Lab	Credit Hrs.
T-ISC	213	Production Planning	3	0	3
T-BUS	233	Personnel Management	3	0	3
T-BUS	123	Business Finance	3	0	3
*		Elective	3	0	3
			12	0	12

*General Education Course

BUSINESS ADMINISTRATION

Course Descriptions

T-ENG 101 Grammar and Composition
Designed to aid the student in the improvement of self-expression in grammar. The approach is functional with emphasis on grammar, diction, sentence structure, punctuation, and spelling. Intended to stimulate students in applying the basic principles of English grammar in their day-to-day situations in industry and social life.
Prerequisite: None

T-BUS 101 Introduction to Business
A survey of the business world with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organization, and management.

T-MAT 110 Business Math
This course stresses the fundamental operations and their application to business problems. Topics covered include payrolls, price marking, interest and discount commission, taxes, and pertinent uses of mathematics in the field of business.
Prerequisite: None

T-BUS 102 Beginning Typing
Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts.
Prerequisite: None

T-EDP 104 Introduction to Data Processing
Fundamental concepts and operational principles of data processing systems, as an aid in developing a basic knowledge of computers, prerequisite to the detail study of particular computer problems. This course is a prerequisite for all programming courses.
Prerequisite: None

T-ENG 204 Effective Speaking
A study of basic concepts and principles of oral communications to enable the student to communicate with others. Emphasis is placed on the speaker's attitude, improving diction, voice, and the application of particular techniques of theory to correct speaking habits and to produce effective oral presentation. Particular attention given to conducting meetings, conferences, and interviews.
Prerequisite:

T-BUS 115 Business Law I
A general course designed to acquaint the student with certain fundamentals and principles of business law, including contract, negotiable instruments, and agencies.
Prerequisite: None

T-ECO 102 Economics I
The fundamental principles of economics including the institutions and practices by which people gain a livelihood. Included is a study of the laws of supply and demand and the principles bearing upon production exchange, distribution, and consumption both in relation to the individual enterprise and to society at large.
Prerequisite: None

T-BUS 103 Intermediate Typing
Instruction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, manuscripts, correspondence, and business forms.
Prerequisite: T-BUS 102 or the equivalent. Speed requirement, 25 words per minute for five minutes.

T-BUS 110 Business Machines
A general survey of the business and office machines. Students will receive training in techniques, processes, operation and application of the ten-key adding machines, full keyboard adding machines, and calculator.
Prerequisite: None

T-PSY 206 Applied Psychology
A study of the principles of psychology that will be of assistance in the understanding of inter-personal relations on the job. Motivation, feelings, and emotions are considered with particular reference to on-the-job problems. Other topics investigated are employee selection, supervision, job satisfaction, and industrial conflicts. Attention is also given to personal and group dynamics so that the student may learn to apply the principles of mental hygiene to his adjustment problems as a worker and a member of the general community.
Prerequisite: None

T-BUS 116 Business Law
Includes the study of laws pertaining to bailments, sales, risk-bearing, partnership-corporation, mortgages, and property rights.

T-ECO 104 Economics II
Greater depth in principles of economics, including a penetration into the composition and pricing of national output, distribution of income international trade and finance, and current economic problems.
Prerequisite: T-ECO 102

T-BUS 123 Business Finance
Financing of business units, as individuals, partnerships, corporations, and trusts. A detailed study is made of short-term, long-term, and consumer financing.

T-BUS 120 Beginning Accounting
Principles, techniques and tools of accounting, for understanding of the mechanics of accounting - collecting, summarizing, analyzing, and reporting information about service and merchantile enterprises, to include practical application of the principles learned.

T-BUS 233 Personnel Management
Principles of human relationships; selection of personnel by interviewing and testing; and training of personnel.

T-BUS 229 Taxes
Application of federal and state taxes to various businesses and business conditions. A study of the following taxes: income, intangible personal property, license taxes, sales and use, excise, estate and inheritance, gift and franchise.

T-ENG 206 Business Communications
Develops skills in techniques in writing business communications. Emphasis is placed on writing action-getting sales letters and prospectuses. Business reports, summaries of business conferences, letters involving credit, collections, adjustments, complaints, orders, acknowledgements, remittances, and inquiry.
Prerequisite: T-ENG 102, T-BUS 102

T-BUS 247 Business Insurance
An investigation of fundamentals of risk and its application with particular emphasis upon the exposures faced by the consumer and the insurance techniques to cope with these exposures. Offered to the individual who will be a purchaser of insurance and as an introductory course to those who might want further study in insurance preliminary to employment.

T-BUS 121 Intermediate Accounting
Partnership and corporation accounting including a study of payrolls, Federal and State taxes. Emphasis is placed on the recording, summarizing and interpreting data for management control rather than on bookkeeping skills. Accounting services are shown as they contribute to the recognition and solution of management problems.
Prerequisite: T-BUS 120

T-BUS 239 Marketing
A general survey of the field of marketing, with a detailed study of the functions, policies, and institutions involved in the marketing process.
Prerequisite: None

T-BUS 122 Advanced Accounting
A study of the accounting of corporations. The accounting for capital stock, corporate bonds, branch operations, and the preparation of annual reports will be covered.

T-BUS 272 Principles of Supervision
Introduces the basic responsibilities and duties of the supervisor and his relationship to superiors, subordinates, and associates. Emphasis on securing an effective work force and the role of the supervisor. Methods of supervision are stressed.

T-ICS 213 Production Planning
The course provides an introduction to the production function of the business or industry in its day-by-day manufacturing process. Functions reviewed are forecasting, product planning and control, scheduling, dispatching, and routing.

T-MAT 115 Metric System
This will be a thorough study of the metric system. All of the various symbols and terms as well as weights, sizes, and measurements will be taught.

EXECUTIVE SECRETARIAL SCIENCE

The demand for better qualified secretaries to work with professional persons continues to increase. These curricula are designed to produce individuals who will be well-versed in the accepted procedures they will encounter on the job.

The graduate of the Executive Secretary program can expect employment as a stenographer or secretary in organizations such as insurance companies, banks, industrial plants, and state government.

The student in the Secretarial curriculum will receive instruction in typing, beginning with an introduction to the touch typewriting system. Instruction emphasizes the development of speed and accuracy, production typing problems, and development of individual production rates. The students learn the techniques needed in planning typing projects that closely approximate the work appropriate to their major field of study.

Each student must take courses in dictation beginning with a course in the theory and practice of reading and writing shorthand. Students who demonstrate proficiency are exempted from the first course.

Office-style dictation with the emphasis on development of speed and accuracy in transcription of material appropriate to the major course of study is the culmination of this phase of the curriculum.

The students also receive instruction in accounting, business law, personality development, terminology and vocabulary. In addition students take related courses in the field of mathematics, psychology and English.

Advanced placement is offered for those students who already possess the knowledge and skill required in any given course.

SECRETARIAL SCIENCE

Suggested Curriculum By Quarters

			Class	Lab	Credit Hrs.
FIRST QUARTER					
T-BUS	101	Introduction to Business	5	0	5
*T-ENG	101	Grammar & Composition	5	0	5
T-BUS	102	Beginning Typing	2	3	3
T-BUS	106	Beginning Shorthand	5	2	6
			17	5	19
SECOND QUARTER					
T-BUS	103	Intermediate Typing	2	3	3
*T-MAT	110	Business Math	5	0	5
T-BUS	112	Filing	3	0	3
T-BUS	107	Intermediate Shorthand	5	2	6
			15	5	17
THIRD QUARTER					
T-BUS	206E	Advanced Shorthand	5	0	5
T-BUS	221	Principles of Bookkeeping	5	0	5
T-BUS	110	Business Machines	2	3	3
T-BUS	104	Advanced Typing	2	3	3
			14	6	16
FOURTH QUARTER					
T-BUS	214	Secretarial Procedures & Practicum	5	3	6
T-BUS	211	Office Machines	2	2	3
T-ENG	206	Business Communications	5	0	5
			12	5	14
FIFTH QUARTER					
T-ECP	104	Introduction to Data Processing	3	0	3
*T-ENG	204	Effective Speaking	5	0	5
*T-ECO	102	Economics I	5	0	5
T-BUS	115	Business Law	3	0	3
			16	0	16
SIXTH QUARTER					
*T-PSY	206	Applied Psychology	5	0	5
T-BUS	271	Office Management	5	0	5
*T-MAT	272	Metric System	3	0	3
		Elective	5	0	5
			18	0	18

* General Education Course

SECRETARIAL SCIENCE

Course Descriptions

T-BUS 101 Introduction to Business
A survey of the business world with particular attention devoted to the structure of the various types of business organizations, methods of financing, internal organization, and management.
Prerequisite: None

T-ENG 101 Grammar and Composition
Designed to aid the student in the improvement of self-expression in grammar. The approach is functional with emphasis on grammar, diction, sentence structure, punctuation, and spelling. Intended to stimulate students in applying the basic principles of English grammar in their day-to-day situations in industry and social life.
Prerequisite: None

T-BUS 102 Beginning Typing
Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts.
Prerequisite: None

T-BUS 106 Beginning Shorthand
A beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms, and phrases.
Prerequisite: None

T-BUS 103 Intermediate Typing
Instruction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, manuscript, correspondence, and business forms.
Prerequisite: T-BUS 102 or the equivalent. Speed requirement, 25 words per minute for five minutes.

T-MAT 110 Business Mathematics
This course stresses the fundamental operations and their application to business problems. Topics covered include payrolls, price marking, interest and discount commission, taxes, and pertinent uses of mathematics in the field of business.
Prerequisite: None

T-BUS 112 Filing
Fundamentals of indexing and filing, combining theory and practice by the use of minature letters, filing boxes and guides. Alphabetic, Triple Check, Automatic, Geographic, Subject, Soundex, and Dewey Decimal Filing.
Prerequisite: None

T-BUS 107 Intermediate Shorthand
Continues study of theory with greater emphasis on dictation and elementary transcription.
Prerequisite: T-BUS 106 or the equivalent.

T-BUS 206 E Advanced Shorthand
Theory and speedbuilding. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription.
Prerequisite: T-BUS 107

T-BUS 221 Principles of Bookkeeping
Emphasis is primarily on the techniques of accurate record-keeping. Most work will be in the practice of managing financial information within a set of ledgers. Definitions of the basic terminology of accounting but with emphasis on the mechanics of keeping records.

T-BUS 110 Business Machines
A general survey of the business and office machines. Students will receive training in techniques, processes, operation and application of the ten-key adding machines, full keyboard adding machines, and calculator.

T-BUS 104 Advanced Typing

Emphasis on production typing problems and speedbuilding. Attention to the development of the student's ability to function as an expert typist, producing mailable copies. The production units are tabulation, manuscripts, correspondence and business forms.
Prerequisite: T-BUS 103 or the equivalent. Speed requirement, 40 words per minute for five minutes.

T-BUS 214 Secretarial Procedures
Designed to acquaint the student with the responsibilities encountered by a secretary during the workday. These include the following: receptionist duties, handling the mail, telephone techniques, travel information, telegrams, office records, purchasing of supplies, office organization, and insurance claims.
Prerequisite: None

T-BUS 211 Office Machines
Instructions in the operation of the bookkeeping-accounting machines, duplicating equipment, and the dictating and transcribing machines.
Prerequisite: T-BUS 110

T-ENG 206 Business Communications
Develops skills in techniques in writing business communications. Emphasis is placed on writing action--getting sales letters and prospectuses. Business reports, summaries of business conferences, letters involving credit, collections, adjustments, complaints, orders, acknowledgements, remittances, and inquiry.
Prerequisite: T-ENG 102

T-ECP 104 Introduction to Data Processing
Fundamental concepts and operational principles of data processing systems, as an aid in developing a basic knowledge of computers, prerequisite to the detail study of particular computer problems. This course is a prerequisite for all programming courses.
Prerequisite: None

T-ENG 204 Effective Speaking
A study of basic concepts and principles of oral communications to enable the student to communicate with others. Emphasis is placed on the speaker's attitude, improving diction, voice, and the application of particular techniques of theory to correct speaking habits and to produce effective oral presentation. Particular attention is given to conducting meetings, conferences, and interviews.
Prerequisite: T-ENG 101

T-ECO 102 Economics I
The fundamental principles of economics including the institutions and practices by which people gain a livelihood. Included is a study of the laws of supply and demand and the principles bearing upon production exchange, distribution, and consumption both in relation to the individual enterprise and to society at large.
Prerequisite: None

T-BUS 115 Business Law
A general course designed to acquaint the student with certain fundamentals and principles of business law, including contracts, negotiable instruments, and agencies.
Prerequisite: None

T-PSY 206 Applied Psychology
A study of the principles of psychology that will be of assistance in the understanding of inter-personal relations on the job. Motivation, feelings, and emotions are considered with particular reference to on-the-job problems. Other topics investigated are employee selection, supervision, job satisfaction, and industrial conflicts. Attention is also given to personal and group dynamics so that the student may learn to apply the principles of mental hygiene to his adjustment problems as a worker and a member of the general community.
Prerequisite: None

T-BUS 271 Office Management
Presents the fundamental principles of office management. Emphasis on the role of office management including its functions, office automation, planning, controlling, organizing and actuating office problems.
Prerequisite: None

T-MAT 115 Metric System
This will be a thorough study of the metric system. All of the various symbols and terms as well as weights, sizes, and measurements will be taught.

EARLY CHILDHOOD SPECIALIST

The Early Childhood Specialist curriculum is a program developed to train people in all phases of child growth and development. Through MTI's class-room and laboratory experiences, students develop a knowledge and understanding of early childhood.

In order to work in a controlled environment, MTI has developed a model child development center which exceeds all state and local requirements. A student's training consists of eight quarters of classroom activities. During the two-year period, students participate in operating and observing conditions at the child development center. MTI's operational development center is a self-sufficient system operated by students and instructors.

Through MTI's academic training and practical experience students achieve a thorough knowledge of young children.

Three exit levels are possible within the curriculum:

(1) Child care worker certificate
Completion of one to three quarters of the Early Childhood Specialist curriculum

(2) Child Care Diploma
Completion of at least one year or four quarters of work in the Early Childhood Specialist curriculum

(3) Early Childhood Specialist Degree
Completion of two years or eight required quarters

Numerous job opportunities exist for graduates ranging from working in a day care center to owning and operating a day care center.

EARLY CHILDHOOD SPECIALIST

Suggested Curriculum By Quarters

				Class	Lab	Credit Hrs.
FIRST QUARTER						
	NUT	102	Nutrition for Young Children	2	3	3
	PSY	109	Basic Human Relations	3	0	3
	PSY	105	Human Growth & Development	4	0	4
	EDU	176	Practicum	0	18	2
				9	21	12
SECOND QUARTER						
*	ENG	201	Reading Improvement	3	0	3
T-	PSY	121	Developmental Group Processes	3	0	3
T-	PSY	122	Child Psychology	3	0	3
*	SOC	104	Family: A Cross Culture Survey	3	0	3
	EDU	177	Practicum	0	18	2
				12	18	14
THIRD QUARTER						
*	ENG	212	Oral Communications	3	0	3
*T-	PSY	123	Educational Psychology	3	0	3
T-	EDU	122	Principles of Day Care	3	0	3
*T-	EDU	123	*Elective - History & Philosophy	3	0	3
	EDU	178	Practicum	0	18	2
				12	18	14
FOURTH QUARTER						
*T-	MAT	123	Applied Math	3	0	3
*T-	HEA	101	Personal Health & Hygiene	3	0	3
T-	EDU	124	Day Care of Infants	3	0	3
*	ENG	107	Written Communications	3	0	3
	EDU	179	Practicum	0	18	2
				12	18	14
FIFTH QUARTER						
	ENG	217	*Children's Literature	3	2	4
T-	EDU	217	Day Care of Preschool Child	3	0	3
T-	EDU	218	Early Childhood Curriculum	3	0	3
	EDU	280	Practicum	0	19	2
				9	21	12

* General Education Course

EARLY CHILDHOOD SPECIALIST

(continued)

				Class	Lab	Credit Hrs.
SIXTH QUARTER						
*	EDU	114	Audio-Visual Instruction	3	2	4
	PED	110	Day Care Health Services	3	0	3
T-	EDU	219	Staff Training for Day Care	3	0	3
	EDU	281	Practicum	0	19	2
				9	21	12
SEVENTH QUARTER						
	EDU	210	Organization & Administration of Child Development Centers	3	0	3
	EDU	151	Creative Activities for Young Children	3	2	4
	EDU	204	Parent Education	3	0	3
	EDU		Practicum	0	19	2
				9	21	12
EIGHTH QUARTER						
	EDU	211	Fiscal Operations of a Day Care Center	3	0	3
T-	EDU	221	Seminar on Day Care	5	0	5
	EDU	283	Practicum	0	22	2
				8	22	10

* General Education Course

EARLY CHILDHOOD SPECIALIST

Course Descriptions

NUT 102 Nutrition for Young Children
Study of basic nutrition, with emphasis on (1) methods of helping your children and their families learn nutritional concepts, and (2) planning balanced diets for pre-school children.

PSY 105 Human Growth & Development
A detailed study of the developmental sequence of the prenatal and infant periods, with emphasis on developmental influences and conditions necessary for optimal development of individuals.

EDU 176 Practicum
Beginning of internship will include as much observation time as anything else. Students will observe children's activities and will be assigned simple tasks which aid the activities of their particular job assignment.

SOC 104 Family: A Cross-Culture Survey
Study of the family as a social unit, with primary focus on the influence of family relationships during infancy and childhood. Historical patterns and the evolution of family roles in various types of cultures provide opportunities to analyze and interpret the influence of the culture and the family in relation to the larger society.

EDU 177 Practicum
Students to be on the job 20 hours per week and to increase their observation of coordinating principles learned in class. Interviews with individuals continued.

ENG 212 Oral Communications
A study of basic concepts and principles of oral communications over a broad range of application. Emphasis is focused on those factors which a speaker can control: his attitude, his diction, his voice control, his thought patterns, and his purposes for communicating. Particular attention is given to flexibility in communicating with different persons and different groups.

EDU 178 Practicum
Students will maintain previous work assignment for 20 hours per week. Evaluation and upgrading will continue.

T-MAT 123 Applied Math
A study of the basic principles of mathematics as they apply to everyday use and as they apply to tutoring children in areas of difficulty. Emphasis is on arithmetic skills and basic geometric relationships as they occur in everyday life.

T-HEA 101 Personal Hygiene & Health
Study of influences on physical and mental health, individual practices which aid in maintaining good physical and mental health throughout the life span, and responsibilities of those working with young children to maintain personal health and to serve as models for health practices.

ENG 107 Written Communications
A highly practical course including classroom participation for solid reinforcement of principles. Practice will include writings of all kinds; observations of professional nature, personal feelings, reports, and various assigned materials. Emphasis consistently on clear and effective writing in a variety of situations.

EDU 179 Practicum
Continued 20 hours per week on the job with periodic evaluation.

ENG 217 Children's Literature
An overview of children's literature from pre-school to grade six. Speaking, listening, reading, and role playing will be emphasized through the study of the multi-media approach to children's literature.

EDU 280 Practicum
Continued 20 hours per week on the job with periodic evaluation.

EDU 281 Practicum
Continued 20 hours per week on the job with periodic evaluation.

EDU 210 Organization & Administration of Child Development Centers
To acquaint potential administrators of Day Care and Child Development Centers with the various aspects of the profession. Readings, discussion, films, specialists, and trips to centers to study facilities are utilized.

EDU 151 Creative Activities for Young Children
Individual and group exploration of activities and media for promoting optimal overall development of children, with special emphasis on music, art, science, and oral language development. Laboratory experiences provide opportunities to plan and implement a program which demonstrates the adaptability of specific activities and media to a variety of age levels.

EDU 204 Parent Education
Study of ways parents can be involved in the child development center, of the purposes and value of home visitation, and of techniques for reporting child progress to parents. The role of the early childhood specialist in aiding parents in guidance of the child's development is emphasized. Each student will develop a series of programs appropriate for presentation to the parents of pre-school children.
Prerequisite:

EDU 282 Practicum
Student's work hours increased to 30 per week commensurate with the increased level of skills and understandings. Evaluation interviews continued.

EDU 283 Practicum
Continued 30 hours per week on the job with evaluation interviews continued.

EDU 211 Fiscal Operation of a Child Care Center
A study of fiscal Child-Care Center management. Record keeping, cost analysis, and auditing procedures will be stressed. Federal and State tax procedures and employers' fiscal responsibility to employees will be a major concern. Licensing and certification requirements will be related to capital construction.

PSY 109 Basic Human Relations
This course is designed to aid the student in studying the basic principles of individual and group behavior; to help the student gain insight that will foster a healthier personality; to help the student to better understand himself and others as well as learning to accept individual differences through group therapy.

ENG 201 Reading Improvement
Designed to improve the students' ability to read rapidly and accurately with maximum comprehension of material and to expand the individual's vocabulary for practical use.

T-PSY 121 Developmental Group Processes
Study of human behavior, with emphasis on developmental aspects, motivations, common behavioral patterns, and the role of defense mechanisms in human behavior. Laboratory experiences will demonstrate a variety of related theories to human behavior.

T-EDU 122 Principles of Day Care
A basic background course in Child Development designed to bring questions of methods and goals of quality day care services for children into perspective.

T-EDU 123 History of Philosophy
Deals with the history of education in the United States throughout the centuries and basic associated philosophies of our educational system. A study of noted philosophers and their educational theories will also be surveyed.

T-EDU 218 Early Childhood Curriculum
A specialty course designed to help students become more familiar with all major areas of a good Early Childhood Curriculum and gain insight into various constructions which would lend way for a young child's optimum development in these areas.

EDU 114 Audio-Visual Instruction
An introduction to the nature and use of audio-visual materials. Emphasis is on the operation of equipment allowing the student to become more knowledgeable in operating the following: tape recorder, motion picture projector and camera, filmstrip, slide, opaque and overhead projectors.

PED 110 Day Care Health Services
A study of community health services and responsibilities to children in day care. The function of the family, the school, and governmental agencies will be emphasized. A major objective will be the developing of skills required for screening, referrals and follow-up.

T-EDU 221 Seminar on Day Care
A general wrap-up and tying together of all knowledge gained over a 2 year-academic period in Child Development for Specialist II students.

ENG 217 Children's Literature
Designed to familiarize the student with children's books, assist the student in selecting books for young children, introduce the student to methods and techniques used in story telling and provide them with the opportunity to use these methods.

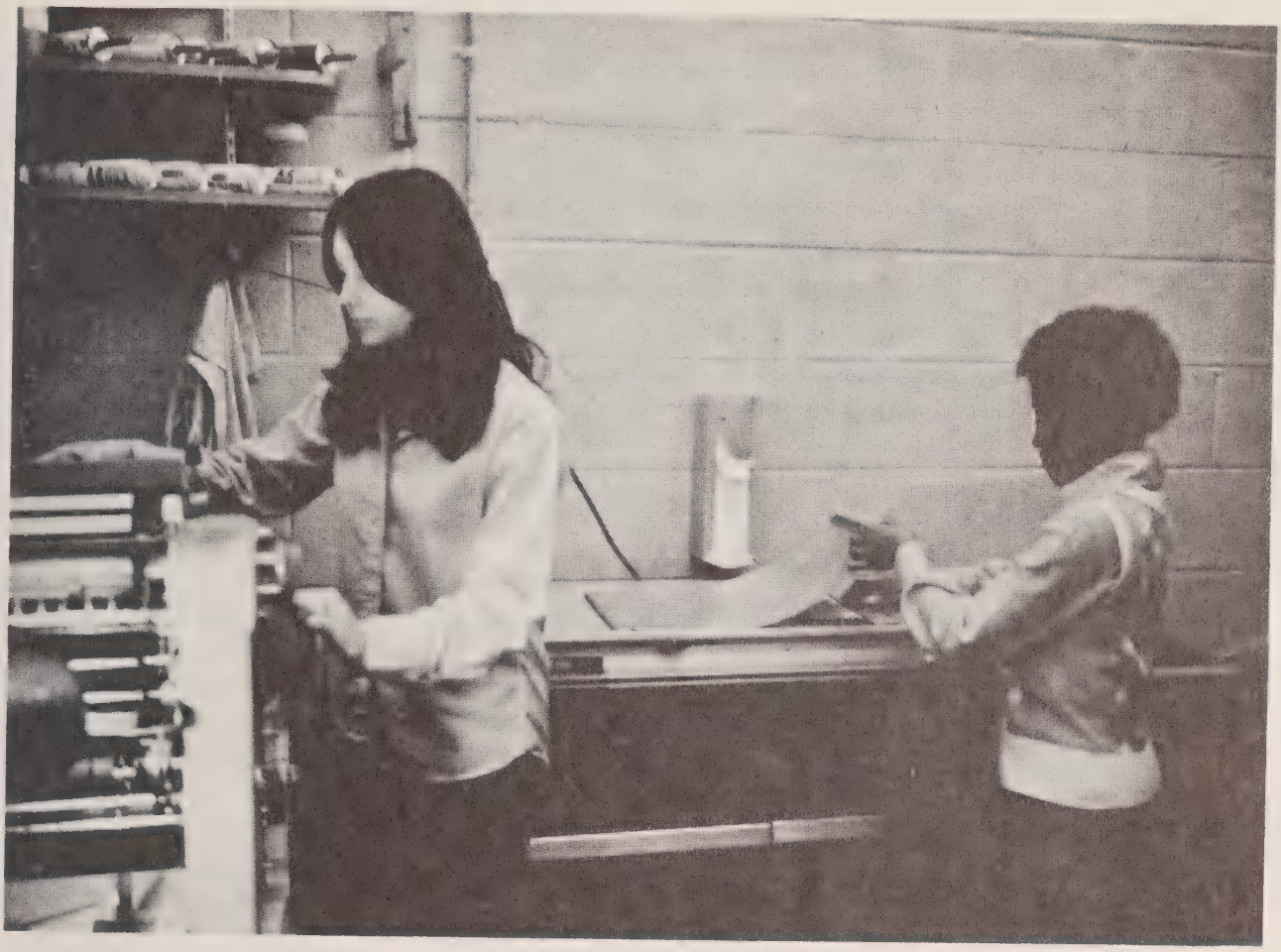
T-PSY 122 Child Psychology
A course designed to introduce students to the basic concepts and principles of child Psychology, and give them a working knowledge of techniques employed in behavior change and reorganization.

T-PSY 123 Educational Psychology
An introductory course in how and why young children learn. The basic learning theories will be explored as they relate to curriculum and environmental design for young children.

T-EDU 219 Staff Training for Day Care
Day Care Training Course in the principles and practices of in-service and pre-service training for day care staff. The Workshop Approach will be used; student will utilize skills and knowledge acquired through practicum and courses to build foundations for workshop production.

EDU 217 Day Care Of Pre-School Children
A study of the methods, principles and philosophy of Day Care as they relate to planning a program for the young children who are in Day Care Centers. Requirements for Certification and Licensing in North Carolina will be one of the primary focuses of the course.

T-EDU 124 Day Care of Infants
The teaching of and care of infants when placed in groups. The method, principles and actual practices of infant care. Students will study existing infant care program, design materials and make plans for an infant care center which would meet federal, local and state guidelines.



EDUCATIONAL SPECIALIST

The shifting of our labor market is largely in the area of increased numbers of jobs in human services. And further, the kinds of human services are multiplying rapidly. More and more, the areas of human service require para-professional persons to assist the professionals with the work load at hand. And, frequently, that work load requires of the para-professional, knowledge, and insights into the best information available on how to help people more effectively.

The Educational Specialist curriculum is designed to prepare people for a career in education. Through classroom instruction and actual on-the-job training, a student will acquire the knowledge and experience necessary for a career in education as a school secretary, teacher's aid, or media specialist.

An Associate Degree in Applied Science is awarded upon successful completion of the two-year program.

EDUCATIONAL SPECIALIST

Suggested Curriculum By Quarters

				Class	Lab	Credit Hrs.
FIRST QUARTER						
*	ENG	100	Grammar & Composition	5	0	5
T-	BUS	102	Beginning Typing	2	3	3
*	PSY	111	Seminar in Personal Development	4	0	4
	EDU	176	Practicum	0	26	3
				11	29	15
SECOND QUARTER						
	LIB	103	Library Reference	3	0	3
T-	BUS	103	Intermediate Typing	2	3	3
T-	BUS	112	Filing	3	0	3
*	SOC	107	Introduction to Sociology	3	0	3
	EDU	177	Practicum	0	26	3
				11	29	15
THIRD QUARTER						
*T-	BUS	110	Business Machines	2	3	3
	PSY	105	Human Growth & Development I	5	0	5
	SOC	202	Social Problems	3	0	3
	EDU	178	Practicum	0	27	3
				10	30	14
FOURTH QUARTER						
*	MAT	122	Applied Math	5	0	5
*	HEA	101	Personal Health & Hygiene	3	0	3
T-	BUS	211	Office Machines	2	2	3
	PSY	106	Human Growth & Development II	3	0	3
	EDU	179	Practicum	0	25	2
				13	27	16
FIFTH QUARTER						
	EDU	203	The Exceptional Child	3	0	3
*T-	BUS	110	Business Math	5	0	5
T-	ENG	206	Business Communications	5	0	5
	EDU	180	Practicum	0	27	3
				13	27	16
SIXTH QUARTER						
	ENG	204	Effective Speaking	5	0	5
	EDU	131	School Record & Reports	2	0	3
*	SOC	104	Family: A Cross Culture Survey	3	0	3
	EDU	181	Practicum	0	30	3
				10	30	14

* General Education Course

EDUCATIONAL SPECIALIST

(continued)

				Class	Lab	Credit Hrs.
SEVENTH QUARTER						
	SOC	213	Marriage and Family	3	0	3
	PSY	206	Applied Psychology	5	0	5
*	POL	104	Intro. to Government Structures	3	0	3
	EDU	182	Practicum	0	29	3
				11	29	14
EIGHTH QUARTER						
	EDU	151	Games for Elementary Schools	3	0	3
*	GEO	201	Geography	3	0	3
	EDU	112	Audio Visual Equipment & Machines	2	2	3
				8	2	9

* General Education Course

EDUCATIONAL SPECIALIST

Course Descriptions

ENG 100 Grammar & Composition
A study of basic grammar requirements for effective oral and written communications. The approach is a functional, composition and grammar and combination speaking and grammar to reinforce application in day-to-day situations.

T-BUS 102 Beginning Typing
An introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts.

PSY 111 Seminar in Personal Development
An overriding purpose governs this course: An Auxiliary Education Specialist must have a thorough knowledge of self and his self-concept before his actions can be effective in helping other people. The seminar in Personal Development will include instructional activities which bring about self-awareness: (1) in communications, (2) of self-identity, (3) of group identity, (4) of self-behavior, and (5) of group behavior. The majority of instruction is in form of group activities.

EDU 176 Practicum
Beginning of internship will include as much observation time as anything else. Students will observe children's activities and will be assigned simple tasks which aid the activities of their particular job assignment.

LIB 103 Library Reference
Study of general encyclopedia, special reference books, and other basic sources used in reference work. Also practice in preparation of simple bibliographies, emphasizing correct form.

T-BUS 103 Intermediate Typing
Instruction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, manuscript, correspondence, and business forms. Prerequisite: T-BUS 102 or the equivalent. Speed requirement, 25 words per minute for five minutes.

T-BUS 112 Filing
Fundamentals of indexing and filing, combining theory and practice by the use of miniature letters, filing boxes and guides. Alphabetic, Triple Check, Automatic, Geographic, Subject, Soundex, and Dewey Decimal filing.

SOC 107 Introduction to Sociology
An overview course designed to follow up fundamentals introduced in Seminar on Personal Development. An attempt to provide an understanding of culture, collective behavior, community life, social institutions and social change. Presents the scientific study of man's behavior in relation to other men, the general laws affecting the organization of such relationships and the effects of social life on human personality and behavior.

EDU 177 Practicum
Students to be on the job 20 hours per week and to increase their observation of coordinating principles learned in class. Interviews with individuals continued.

T-BUS 110 Business Machines
A general survey of the business and office machines. Students will receive training in techniques, processes, operation and application of the ten-key adding machines, full keyboard adding machines, and calculator.

PSY 105 Human Growth & Development I
A detailed study of the developmental sequence of the prenatal and infant periods, with emphasis on developmental influences and conditions necessary for optimal development of individuals.
Prerequisite: SOC 104

EDU 178 Practicum
Students will maintain previous work assignment for 20 hours per week. Evaluation and upgrading will continue.

MAT 122 Applied Math
A study of the basic principles of mathematics as they apply to everyday use and as they apply to tutoring children in areas of difficulty. Emphasis is on arithmetic skills and basic geometric relationships as they occur in everyday life.

HEA 101 Personal Health & Hygiene
Study of influences on physical and mental health, individual practices which aid in maintaining good physical and mental health throughout the life span, and responsibilities of those working with young children to maintain personal health and to serve as models for health practices.

T-BUS 211 Office Machines
Instructions in the operation of the bookkeeping-accounting machines, duplicating equipment, and the dictating and transcribing machines.
Prerequisite: T-BUS 110

PSY 106 Human Growth & Development II
A detailed study of the developmental sequence during the pre-school period, ages 2 to 6. Emphasis is given to factors influencing development: the importance of experiences in establishing patterns of behavior, attitudes, interpersonal skills, language usage, and the relationship of early childhood to later realization of potential.
Prerequisite: PSY 105

EDU 179 Practicum
Continued 20 hours per week on the job with periodic evaluation.

EDU 203 The Exceptional Child
Study of children with developmental variations requiring modification in activities. Consideration is given to recognition of problems, community resources, and appropriate activities for the child with exceptional deviations in personality or physical development.
Prerequisite:

T-BUS 110 Business Math
This course stresses the fundamental operations and their application to business problems. Topics covered include payrolls, price marking, interest and discount commission, taxes, and pertinent use of mathematics in the field of business.
Prerequisite: None

T-ENG 206 Business Communications
Develops skills in techniques in writing business communications. Emphasis is placed on writing action--getting sales letters and prospectuses. Business reports, summaries of business conferences, letters involving credit collections, adjustments, complaints, orders, acknowledgements, remittances, and inquiry.
Prerequisite:

EDU 180 Practicum
Continued 20 hours per week on the job with periodic evaluation.

ENG 204 Effective Speaking
A study of basic concepts and principles of oral communications to enable the student to communicate with others. Emphasis is placed on the speaker's attitude, improving diction, voice, and the application of particular techniques of theory to correct speaking habits and to produce effective oral presentation. Particular attention is given to conducting meetings, conferences, and interviews.
Prerequisite:

EDU 131 School Records and Reports
The preparation of school records and reports. The course will include the procedures for general reports, the procedures for special reports and records, and the management of records.
Prerequisite: None

SOC 104 Family: A Cross-Culture Survey
Study of the family as a social unit, with primary focus on the influence of family relationships during infancy and childhood. Historical patterns and the evolution of family roles in various types of cultures provide opportunities to analyze and interpret the influence of the culture and the family in relation to the larger society.

EDU 181 Practicum
Continued 20 hours per week on the job with periodic evaluation.

SOC 213 Marriage and Family
Study of the family as a social unit, with primary focus on the influences of family relationships during infancy and childhood. Historical patterns and the evolution of family roles in various types of cultures provide opportunities to analyze and interpret the influence of the culture and the family in relation to the larger society.

POL 104 Introduction to Government Structure
A serious study of negotiating social organizations and their bureaucracies with special emphasis on obtaining services for clients. Study will necessarily include a basic introduction to management of organizations and how those principles relate to the sociology of governmental structure.

EDU 182 Practicum
Student's work hours increased to 30 per week commensurate with the increased level of skills and understandings. Evaluation interviews continued.

EDU 151 Games for Elementary Schools
Individual and group exploration of activities and media for promoting optimal overall development of children, with special emphasis on music, art, science, and oral language development. Laboratory experiences provide opportunities to plan and implement a program which demonstrates the adaptability of specific activities and media to a variety of age levels.

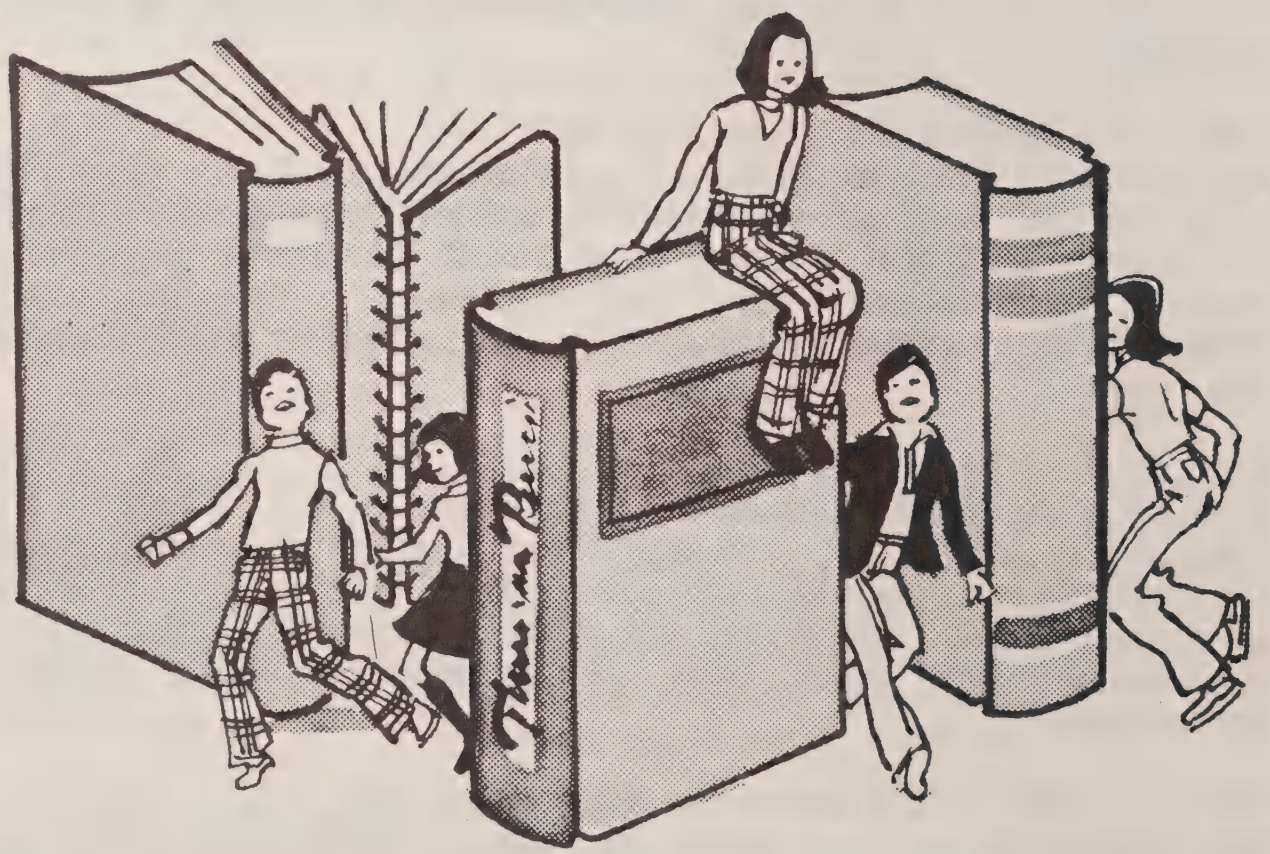
GEO 201 Geography
A study of the child's immediate environment as it is related to his "outside" world. The scope and sequence of geography in grades K-6 and the readiness activities which will prepare the child for an appreciation of geography. The use of television and other media and their effectiveness in teaching space, place, time, and management of the physical environment.

EDU 112 Audio Visual Equipment & Machines
An introduction to the nature and use of audiovisual materials. (AV-ITV-VTR). Emphasis is on the operation of equipment and the communication characteristics of the various news print media. Includes preparation of "soft-ware" for various audiovisual media.

EDU 183 Practicum
Continued 30 hours per week on the job with evaluation interviews continued.

PSY 206 Applied Psychology
A study of the principles of psychology that will be of assistance in the understanding of inter-personal relations on the job. Motivation, feelings, and emotions are considered with particular reference to on-the-job problems. Other topics investigated are employee selection, supervision, job satisfaction, and industrial conflicts. Attention is also given to personal and group dynamics so that the student may learn to apply the principles of mental hygiene to his adjustment problems as a worker and a member of the general community.

SOC 202 Social Problems
A study of the fundamental principles of social organization. Course attempts to link sociological concepts and theories to social reality. Includes the contemporary American social institutions in relation to technological changes, population growth, urbanization, and other issues that result in social conflict.



Criminal Justice-Protective Service Technology

INTRODUCTION

Purpose of Curriculum

Criminal Justice-Protective Service Technology is a program that covers law enforcement, security services, and correction. In the last decade these specialty areas have evolved into highly complex professions requiring a variety of skills and special knowledge in criminal law, counseling, surveillance, criminalistics, psychology, and sociology.

This curriculum is designed with a core of courses to afford the student the opportunity to acquire basic skills and knowledge and then to specialize in one of three areas. The law enforcement option provides an opportunity for specialized study in such areas as criminal law, criminalistics, criminal investigation, and traffic enforcement. The security services option provides an opportunity for specialized study in such arts as surveillance, security systems, accident investigation, fire prevention, and common carrier protection. The correction option provides an opportunity for specialized study in such areas as counseling, administration of confinement facilities, correction law, rehabilitation, paroles, probation, and pardons.

Career Opportunities

The Criminal Justice-Protective Service Technology program of study enables a graduate to acquire a position in the field of law enforcement, security services, or correction. Currently there is a demand for dedicated men and women in all of these areas.

Law enforcement agencies are in need of trained professionals. A law enforcement graduate can find employment with law enforcement agencies as an officer, administrator, special investigator, laboratory technician, communication expert, or in research.

Business and industry are looking for professionals to provide security. A security services graduate can find employment with business and industry as a guard, surveillance officer, transportation officer, or security administrator.

Correction is in need of highly trained individuals to bring about the changes needed in correction institutions. A correction graduate can find employment with a penal institutions, a probation board, or with a board of parole as a counselor, administrator, or consultant.

CRIMINAL JUSTICE AND LAW ENFORCEMENT

			Class	Lab	Credit Hrs.
FIRST QUARTER					
*ENG	101	Grammar	3	0	3
*MAT	101	Technical Math	5	0	5
PSC	101	Police Science I	5	0	5
			13	0	13
SECOND QUARTER					
*ENG	102	Composition	3	0	3
*MAT	102	The Metric System	3	0	3
CJC	101	Introduction to Criminal Justice	3	0	3
PSC	102	Police Science II	5	0	5
			14	0	14
THIRD QUARTER					
*ENG	103	Report Writing	3	0	3
*POL	104	The National Government	3	0	3
*PSY	150	Inter-Personal Relationships	3	0	3
PSC	103	Police Science III	5	0	5
			14	0	14

FOURTH QUARTER

*ENG	204	Oral Communications	3	0	3
*POL	103	Local and State Government	3	0	3
*SOC	108	Current Social Problems	3	0	3
PSC	104	Legal Court and Procedure	3	0	3
			12	0	12

FIFTH QUARTER

CJC	125	Due Process	5	0	5
CJC	102	Criminology	5	0	5
PSC	202	Community Relations	2	0	2
			12	0	12

SIXTH QUARTER

CJC	110	Juvenile Delinquency	5	0	5
CJC	201	Motor Vehicle Law	3	0	3
PSC	210	Arms Identification Care & Training	3	2	4
			11	2	12

SEVENTH QUARTER

CJC	202	Traffic Enforcement	3	0	3
CJC	208	Crime Scenes--Collection & Preservation of Evidence	3	2	4
CJC	210	Criminal Investigation	5	0	5
			11	2	12

EIGHTH QUARTER

CJC	220	Police Organization & Administration	5	0	5
CJC	209	Correction Law	3	0	3
CJC	240	Security Systems	5	0	5
			13	0	13

* General Education Courses

CRIMINAL JUSTICE AND LAW ENFORCEMENT

COURSE DESCRIPTION

FIRST QUARTER

Eng 101 Grammar
Designed to aid the student in the improvement of self-expression in grammar. The approach is functional with emphasis on grammar, diction, sentence structure, punctuation, and spelling. Intended to stimulate students in applying the basic principles of English grammar in their day-to-day situations in industry and social life.

Mat 101 Technical Math
This course is designed to bring the Law Enforcement students the mathematical principles needed in their field. Topics studied are formulas, logarithms, right triangle, trigonometry, graphing and statistics as they relate to VASCAR, breathalizer, radar and other such devices.

Psc 101 Police Science I
Topics to be included in this course are:
History and Constitutional Law, Instruction to Criminal Law, First Aid, Communications for the Law Enforcement Officer, How to Recognize and Handle Abnormal People, and Laws of Arrest.

SECOND QUARTER

Eng 102 Composition
Designed to aid the student in the improvement of self-expression in business and technical composition. Emphasis is on the sentence, paragraph, and whole composition.

Mat 102 The Metric System
This will be a thorough study of the metric system. All of the various symbols and terms as well as weights, sizes and measurements will be taught.

CJC 101 Introduction to Criminal Justice
This course is designed to familiarize the student with a philosophy and history of law enforcement, its legal limitation in our society, the primary duties and responsibilities of the various agencies in the criminal justice field, the basic processes of justice, an evaluation of law enforcement's current position, and an orientation relative to the profession as a career.

Psc 102 Police Science II
Topics to be included in this course are:
Laws of Search and Seizure, Laws and Rules of Evidence, General Criminal Investigation, Motor Vehicle Accident Investigation Reporting, Motor Vehicle Laws, North Carolina Alcoholic Beverage Control Laws.

THIRD QUARTER

Eng 103 Report Writing
The fundamentals of English are utilized as a background for the organization and techniques of modern report writing. Exercises in developing typical reports, using writing techniques, and graphic devices are completed by the students. Practical application in the preparation of a full-length report is required of each student at the end of the term. This report must have to do with something in his chosen curriculum.

Pol 104 The National Government
English and colonial background, the articles of confederation and the framing of the federal constitution. The nature of the federal union, national, federal powers, and political parties. The general organization and functioning of national government.

Psy 150 Interpersonal Relationships
A framework for understanding the self, other people, and communications or transactions between people, including those manifesting deviant behavior. Each student will do a self-analysis and, if he wishes, set up a goal to accomplish for himself during the course. The primary focus of the course is personal growth with some attention given to communication between the student and his clients.

Psc 103 Police Science III
Topics to be included in this course are:

Recognition and Identification of Drugs - Drug Abuse, Laws Related to Riot and Crowd Control, Crowd Control, Court Structure and Procedure, Report Writing and Note Taking, Juveniles, Defensive Tactics and Firearms, Patrol Operations, Public Relations, Use and Care of Fire Arms.

FOURTH QUARTER

Eng 204 Oral Communications
A study of basic concepts and principles of oral communications to enable the student to communicate with others. Emphasis is placed on the speaker's attitude, improving diction, voice, and the application of particular techniques of theory to correct speaking habits and to produce effective oral presentation. Particular attention given to conducting meetings, conferences, and interviews.

Pol 103 Local and State Government
A study of state and local government, state-federal interrelationships, the functions and prerogatives of the branches. Problems of administration, legal procedures, law enforcement, police power, taxation, revenues, and appropriations. Special attention will be given to North Carolina.

Soc 108 Current Social Problems
A study of special problem-situational areas in human life that is designed to increase student sensitivity toward the problems and conflicts in the American Social Structure.

Psy 104 Legal Court and Procedure
This course is designed to provide the student with a review of court systems; procedures from incident to final disposition; principles of constitutional, federal, state, and civil laws as they apply to and affect law enforcement.

FIFTH QUARTER

CJC 125 Due Process
This course is designed to provide the student with a review of court systems; procedures from incident to final disposition; principles of constitutional, federal, state, and civil laws as they apply to and affect law enforcement.

CJC 102 Criminology
A general course designed to introduce the student to the causation of crime and delinquency. The historical and contemporary aspects of crime, law enforcement, punishment, and correctional administration will be discussed.

PSC 202 Community Relations
This course will provide the student with an understanding of community structures as they relate to minority groups, peer groups, socioeconomic groups, leader groups, and group relations. Emphasis will be placed on the organization and function of these groups as they relate to the profession of criminal justice-protective service.

SIXTH QUARTER

CJC 110 Juvenile Delinquency
General Survey of juvenile delinquency as an individual and social problem, theories of delinquency, causation, and methods of correction and prevention. The course will present a general overview of the juvenile court.

CJC 201 Motor Vehicle Law
A study of the traffic enforcement codes with primary emphasis placed on North Carolina law as it relates to motor vehicles.

PSC 210 Arms Identification Care & Training
The student will be exposed to the many different kinds of arms that he might encounter and also to properly care for and use the equipment he needs to do his job.

SEVENTH QUARTER

CJC 202 Traffic Enforcement
A study which covers the history of the traffic enforcement problems and gives an overview of the problem as it exists today. Attention will be given to the three E's (enforcement, evaluation, effectiveness) and legislation, the organization of the traffic unit, the responsibilities to the traffic function of the various units within the law enforcement agency, enforcement tactics, evaluation of the traffic program effectiveness and the allocation of men and materials. Accident investigation is stressed.

CJC 208 Crime Scenes -- Collection & Preservation of Evidence
This course is designed to familiarize the student with the importance of identifying types of evidence at a crime scene, to teach him to properly mark the evidence, and how to establish a legal chain of evidence. The student is instructed in the various ways of preserving and packaging evidence for shipment to a crime lab.

CJC 210 Criminal Investigation
Introduction to the fundamentals of investigation; crime scene research; recording, collection and preservation of evidence; sources of information; interview and interrogation; case preparation and court presentation; and the investigation of specific offenses such as arson, narcotics, sex, larceny, burglary, robbery and homicide.

EIGHTH QUARTER

CJC 220 Police Organization & Administration
Introduction to principles of organization and administration, discussion of the service functions, e.g., personnel management, police management, training, communications, records, property maintenance, and miscellaneous services.

CJC 209 Correction Law
This course is designed to familiarize the student with the specific laws as they pertain to correction, care, custody, and control.

CJC 240 Security Systems
This course is designed to introduce the student to an overview of the total security concept. The topic is broken down into industrial, commercial, and retail security.

VOCATIONAL PROGRAMS

AIR CONDITIONING AND REFRIGERATION

AUTOMOTIVE BODY REPAIR

AUTOMOTIVE MECHANICS

ELECTRICAL INSTALLATION AND MAINTENANCE

INDUSTRIAL MAINTENANCE

LICENSED PRACTICAL NURSING

LIGHT CONSTRUCTION

POTTERY PRODUCTION

RADIO AND TELEVISION SERVICING

SHEET METAL SPECIALIST

SMALL ENGINES AND EQUIPMENT REPAIR

UPHOLSTERY

WELDING

GENERAL INFORMATION for VOCATIONAL PROGRAMS

Diploma:

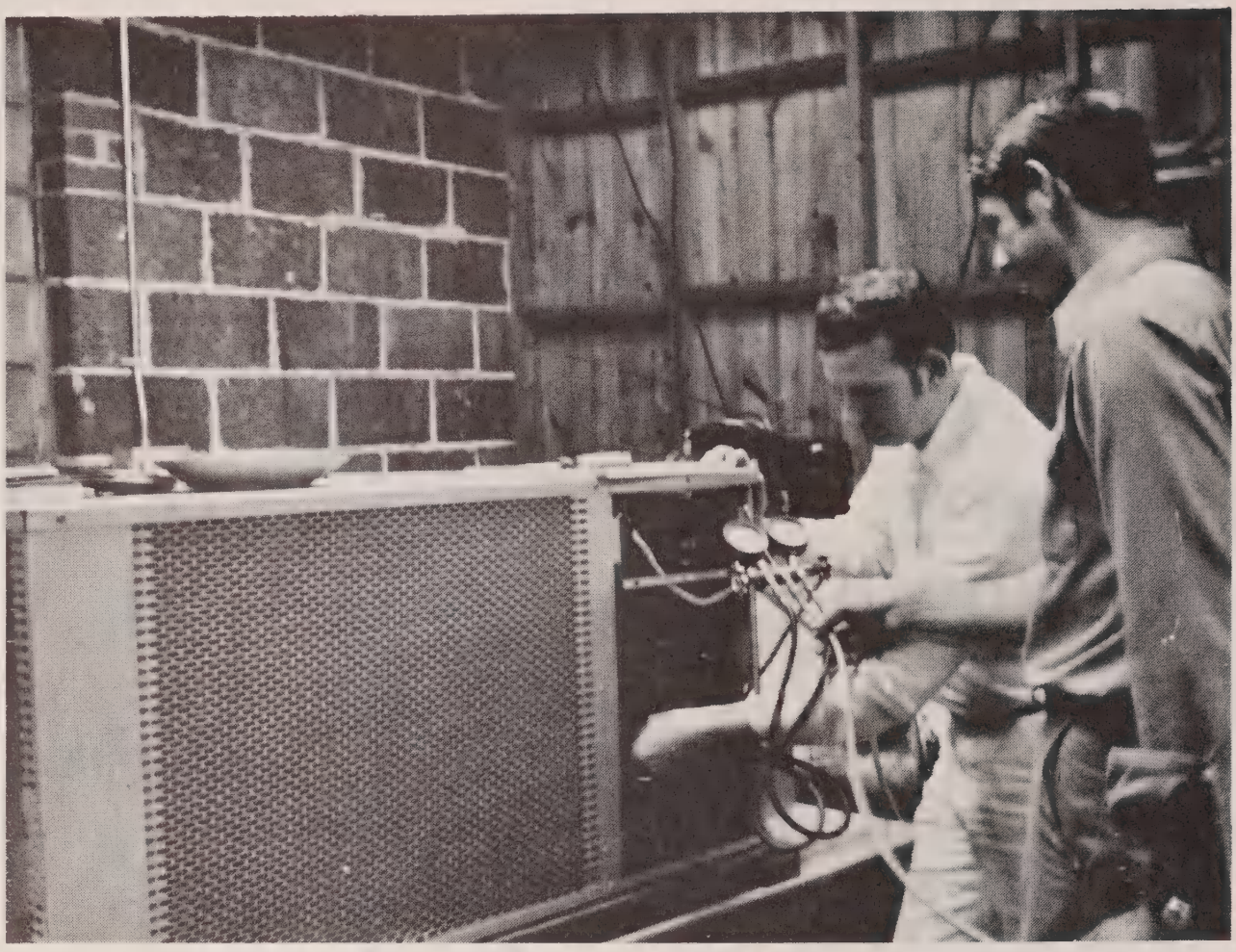
Upon Completion Of The Curriculum Work, The Vocational Diploma Is Awarded To The Individual To Certify That Professional Training Requirements Have Been Met.

Admission Requirements:

To Enter The Vocational Program, The Individual Must Be At Least 18 Years Old Or Hold A High School Diploma Or Certified Equivalent. If The Individual Is 18 Or Over, The High School Diploma Is Not Required For Entrance Into The Vocational Program.

Additional Requirements For Licensed Practical Nurse:

The Applicant Must Be A High School Graduate Or The Certified Equivalent And Must Take The Appropriate Admissions Test Given By The School.



AIR CONDITIONING AND REFRIGERATION

Purpose of Curriculum

In recent years the use of air conditioning and refrigeration equipment has increased tremendously. Practically all new building construction for business and commercial use have "all year" comfort systems. Many homes now have air conditioning and the trend is toward greater use of "all year" systems of cooling and heating. The food industry is requiring greater use of refrigeration systems in freezing, storage, and display of products. With this great upswing in the use of air conditioning and refrigeration equipment, a greater demand is made on trained personnel to install, operate, maintain and service this equipment.

This curriculum is designed to give the students practical knowledge that will enable them to become capable service men in the industry. The principle objective has been to outline the required technical and related instruction to enable them to understand the basic principles involved in the construction, operation, and maintenance of equipment. Job opportunities exist with companies that specialize in air conditioning, automatic heating, sheet metal and commercial refrigeration installation and service. The service man is employable in areas of sales, maintenance, installation and in the growing fields of truck and trailer refrigeration.

AIR CONDITIONING AND REFRIGERATION

Day Curriculum By Quarters

			Class	Lab	Credit Hrs.
FIRST QUARTER					
		Related Course	3	0	3
		Related Course	5	0	5
AHR	1121	Principles of Refrigeration	5	14	9
DFT	1104	Blueprint Reading: Mechanical	0	3	1
			13	17	18
SECOND QUARTER					
		Related Course	5	0	5
DFT	1116	Blueprint Reading: Air Conditioning	0	3	1
ELC	1102	Applied Electricity	2	3	3
AHR	1122	Domestic & Commercial Refrigeration	5	12	9
			12	18	18
THIRD QUARTER					
		Related Course	3	2	4
		Related Course	3	0	3
AHR	1128	Automatic Controls	3	6	5
		Related Course	0	3	1
AHR	1123	Principles of Air Conditioning	3	7	6
			12	18	19
FOURTH QUARTER					
AHR	1124	Air Conditioning & Refrigeration Servicing	3	6	5
AHR	1126	All Year Comfort Systems	3	6	5
MEC	1120	Duct Construction and Maintenance	3	6	5
		Related Course	3	0	3
			12	18	18

Related Courses Listed on Page 119.

AIR CONDITIONING & REFRIGERATION

Evening Curriculum By Quarters

			Class	Lab	Credit Hrs.
FIRST QUARTER					
		Related Course	3	0	3
DFT	1104	Blueprint Reading: Mechanical	0	3	1
AHR	1121A	Principles of Refrigeration	2	7	4
			5	10	8
SECOND QUARTER					
		Related Course	5	0	5
AHR	1121B	Principles of Refrigeration	3	7	5
			8	7	10
THIRD QUARTER					
ELC	1102	Applied Electricity	2	3	3
DFT	1116	Blueprint Reading: (Air Conditioning)	0	3	1
AHR	1122A	Domestic & Commercial Ref.	2	5	4
			4	11	8
FOURTH QUARTER					
		Related Course	5	0	5
AHR	1122B	Domestic & Commercial Ref.	3	7	5
			8	7	10
FIFTH QUARTER					
		Related Course	0	3	1
		Related Course	3	0	3
AHR	1128	Automatic Controls	3	6	5
			6	9	9
SIXTH QUARTER					
		Related Course	3	2	4
AHR	1123	Principles of Air Cond.	3	7	6
			6	9	10

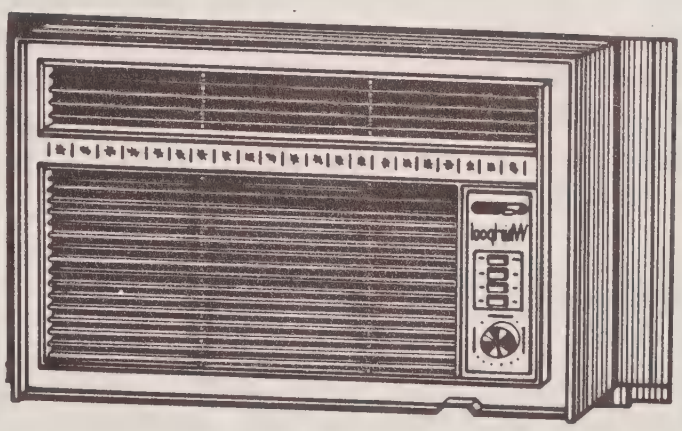
AIR CONDITIONING & REFRIGERATION

(continued)

EVENING

			Class	Lab	Credit Hrs.
SEVENTH QUARTER					
AHR	1124	Air Conditioning & Refrigeration Serv.	3	6	5
MEC	1120A	Duct Construction & Maintenance	3	3	4
			6	9	9
EIGHTH QUARTER					
MEC	1120B	Duct Construction & Maintenance	0	3	1
		Related Course	3	0	3
AHR	1126	All Year Comfort Systems	3	6	5
			6	9	9

Related Courses Listed On Page 119.



AIR CONDITIONING AND REFRIGERATION

Course Descriptions

AHR 1121 Principles of Refrigeration
An introduction to the principles of refrigeration, terminology, the use and care of tools and equipment, and the identification and the function of the component parts of a system. Other topics to be included will be the basic laws of refrigeration; characteristics and comparison of the various refrigerants; the use and construction of valves, fittings, and basic controls. Practical work includes tube bending, flaring and soldering. Standard procedures and safety measures are stressed in the use of special refrigeration service equipment and the handling of refrigerants.
Prerequisite: None

DFT 1104 Blueprint Reading: Mechanical
Interpretation and reading of blueprints. Information of the basic principles of the blueprint; lines, views, dimensioning procedures and notes.
Prerequisite: none

DFT 1116 Blueprint Reading: Air Conditioning
A specialized course in drafting for the heating, air conditioning, and refrigeration student. Emphasis will be placed on reading of blueprints that are common to the trade; blueprints of mechanical components, assembly drawings, wiring diagrams and schematics, floor plans, heating system plans including duct and equipment layout plans, and shop sketches. The student will make tracings of floor plans and layout air conditioning systems.
Prerequisite: DFT 1104

ELC 1102 Applied Electricity
The use and care of test instruments and equipment used in servicing electrical apparatus for air conditioning and refrigeration installations. Electrical principles and procedures for troubleshooting of the various electrical devices used in air conditioning, heating, and refrigeration equipment. Included will be transformers, various types of motors and starting devices, switches, electrical heating devices, and wiring.
Prerequisite:

AHR 1122 Domestic and Commercial Refrigeration
Domestic refrigeration servicing of conventional, hermetic, and absorption systems. Cabinet care, controls, and system maintenance in domestic refrigerators, freezers, and window air conditioning units is stressed. Commercial refrigeration servicing of display cabinets, walk-in cooler and freezer units, and mobile refrigeration systems is studied. The use of manufacturer's catalogs in sizing and matching system components and a study of controls, refrigerants, servicing methods is made. The American Standard Safety Code for Refrigeration is studied and its principles practiced.
Prerequisite: AHR 1121

AHR 1128 Automatic Controls
Types of automatic controls and their function in air conditioning systems. Included in the course will be electric and pneumatic controls for domestic and commercial cooling and heating; zone controls, unit heater and ventilator controls, commercial fan systems controls, commercial refrigeration controls, and radiant panel controls.
Prerequisite: ELC 1102, AHR 1122

AHR 1123 Principles of Air Conditioning
Work includes the selection of various heating, cooling and ventilating systems, investigation and control of factors affecting air cleaning, movement, temperature, and humidity. Use is made of psychrometric charts in determining needs to produce optimum temperature and humidity control. Commercial air conditioning equipment is assembled and tested. Practical sizing and balancing of ductwork is performed as needed.
Prerequisite: AHR 1122

AHR 1124 Air Conditioning & Refrigeration Servicing

Emphasis is placed on the installation, maintenance, and servicing of equipment used in the cleaning, changing, humidification, and temperature control of air in an air conditioned space. Installation of various ducts and lines needed to connect various components is made. Shop work involves burner operation, controls, testing, and adjusting of air conditioning and refrigeration equipment, and location and correction of equipment failure.
Prerequisite: AHR 1123

AHR 1126 All Year Comfort Systems
Auxiliary equipment used in conjunction with refrigeration systems to provide both heating and cooling for "all-year" comfort will be studied and set up in the laboratory. Included will be oil fired systems, gas fired systems, water circulating systems, and electric-resistance systems. Installation of heat pumps will be studied along with servicing techniques. Reversing valves, special types of thermostatic expansion valves, systems of de-icing coils, and electric wiring and controls are included in the study.
Prerequisite: AHR 1123, AHR 1128

MEC 1120 Duct Construction and Maintenance
Study of various duct materials including sheet steel, aluminum, and fiber glass. Safety, sheet metal hand tools, cutting and shaping machines, fasteners and fabrication practices, layout methods, and development of duct systems. The student will service various duct systems and perform on-the-site repairs including ducts made of fiber glass. A study is made of duct fittings, dampers and regulators, diffusers, heater and air washers, fans, insulation and ventilating hoods.
Prerequisites: DFT 1116, AHR 1123
Rerequisite: AHR 1126

AUTO BODY REPAIR

Purpose of Curriculum

The field of automotive body repair and painting needs many more well-trained people to meet the growing demand for the many special skills in this area of employment. In this program, much of the students' time in the shop is devoted to learning skills and practicing these skills on car bodies and their component parts. Every attempt is made to make these practical experiences as close as possible to actual on the job situations. The practical experience and related training provide an ideal way to prepare the students for entry into an occupation that offers many job opportunities.

AUTO BODY REPAIR

Day Curriculum By Quarters

			Class	Lab	Credit Hrs.
FIRST QUARTER					
AUT	1111	Auto Body Repair	5	14	10
		Related Course	5	0	5
		Related Course	3	0	3
		Related Course	0	3	1
			13	17	19
SECOND QUARTER					
		Related Course	5	0	5
DFT	1101	Schematics & Diagrams: Power Mechanics	0	3	1
WLD	1105	Auto Body Welding	0	3	1
AUT	1112	Auto Body Repair	5	14	10
			10	20	17
THIRD QUARTER					
		Related Course	3	0	3
		Related Course	3	2	4
AUT	1115	Trim, Glass, & Radiator Repair	2	3	3
AUT	1113	Metal Finishing & Painting	5	12	9
			13	17	19
FOURTH QUARTER					
AUT	1114	Body Shop Applications	6	21	13
		Related Course	3	0	3
			9	21	16

Related Courses Listed on Page 119.

AUTO BODY REPAIR

EVENING CURRICULUM BY QUARTERS

			Class	Lab	Credit Hrs.
FIRST QUARTER					
		Related Course	3	0	3
		Related Course	0	3	1
AUT	1111A	Auto Body Repair	3	6	5
			6	9	9
SECOND QUARTER					
		Related Course	5	0	5
AUT	1101B	Auto Body Repair	2	8	5
			7	8	10
THIRD QUARTER					
DFT	1101	Schematics & Diagrams: (Power Mechanics)	0	3	1
WLD	1105	Auto Body Welding	0	3	1
AUT	1112A	Auto Body Repair	3	6	5
			3	12	7
FOURTH QUARTER					
		Related Course	5	0	5
AUT	1112B	Auto Body Repair	2	8	5
			7	8	10
FIFTH QUARTER					
		Related Course	3	0	3
AUT	1115	Trim, Glass & Radiator Repair	2	3	3
AUT	1113A	Metal Finishing & Painting	2	5	4
			7	8	10
SIXTH QUARTER					
Related Course			3	2	4
AUT	1113B	Metal Finishing & Painting	3	7	5
			6	9	9
SEVENTH QUARTER					
AUT	1114A	Body Shop Applications	3	12	7
			3	12	7
EIGHTH QUARTER					
		Related Course	3	0	3
AUT	1114B	Body Shop Applications	3	9	6
			6	9	9

Related Courses Listed On Page 119.

AUTO BODY REPAIR

Course Descriptions

AUT 1111 Auto Body Repair
Basic principles of automobile construction, design, and manufacturing. A thorough study of angles, crown, and forming of steel into the complex contour of the present day vehicles. The student applies the basic principles of straightening, aligning, and painting of damaged areas.
Prerequisite: none

DFT 1101 Schematics and Diagrams: Power Mechanics
Interpretation and reading of schematics and diagrams. Development of ability to read and interpret blueprints, charts, instruction and service manuals, and wiring diagrams. Information on the basic principles of lines, views, dimensioning procedures, and notes.
Prerequisite: None

WLD 1105 Auto Body Welding
Welding practices on material applicable to the installation of body panels and repairs to doors, fenders, hoods, and deck lids. Student runs, beads, does butt and fillet welding, and performs tests to detect strength and weaknesses of welded joints. Safety procedures are emphasized throughout the course.
Prerequisite: WLD 1101.

AUT 1112 Auto Body Repair
A thorough study of the requirements for a metal worker, including the use of essential tools, forming fender flanges and beads, and straightening typical auto body damage. The student begins acquiring skills such as shaping angles, crowns and contour of the metal of the body and fenders, metal working and painting.
Prerequisite: AUT 1111, WLD 1101, PHY 1101, and MAT 1101.

AUT 1115 Trim, Glass, and Radiator Repair
Methods of removing and installing interior trim; cutting, sewing and installing headlinings, seat covers, and door trim panels; painting of trim parts and accessories. Glass removal, cutting, fitting, and installation. The student gains a thorough knowledge of the engine cooling system and repairs and replaces damaged cooling system components. Tests are made to insure normal engine cooling operation.
Prerequisite: AUT 112, and WLD 1105.

AUT 1113 Metal Finishing and Painting
Development of the skill to shrink stretched metal, soldering and leading, and preparation of the metal for painting; Straightening of doors, hoods, and deck lids; fitting and aligning; Painting fenders and panels, spot repairs, and complete vehicle painting; the use and application of power tools.
Prerequisites: AUT 1112, and WLD 1105.

AUT 1114 Body Shop Applications
General introduction and instruction in the automotive frame and front end suspension systems, the methods of operation and control, and the safety of the vehicle. Unit job application covers straightening of frames and front wheel alignment. The student applies all phases of training: repair order writing, parts purchasing, estimates of damage, and developing the final settlement with the adjuster.
Prerequisites: AUT 1115, PHY 1102, and DFT 1101.

AUTO MECHANICS

Diploma Program

The Automotive Mechanics program of studies prepares students for entry employment as automotive mechanics. The program emphasizes practical shop experience to develop mechanical and technical skills. Related technical instruction covers the functional principles and operational characteristics of the components of a modern automobile.

Instructional units are devoted to automotive fundamentals, engines, automotive electrical and fuel systems, automotive chassis and power train units, automotive air-conditioning, chassis and suspension systems, and general repair and servicing practices. Successful completion of the program allows individuals to enter the following occupational fields:

Auto Mechanic
Parts Manager
Truck Mechanic
Maintenance Service
Dealer Service Manager
Factory Representative
Sales Technician

Each student may choose the training program he desires. The options are:

(1) One Year Diploma Program -- 4 quarters
(2) Two year Diploma Program -- 7 quarters

AUTO MECHANICS

DAY CURRICULUM BY QUARTERS

			Class	Lab	Credit Hrs.
FIRST QUARTER					
PME	1101	Fundamental Principles of the Internal Combustion Engine	5	17	11
		Related Course	5	0	5
		Related Course	3	0	3
			13	17	19
SECOND QUARTER					
PME	1102	Principles of the Engine Electrical & Fuel Systems	4	14	9
		Related Course	5	0	5
DFT	1101	Schematics & Diagrams: Power Mechanics	0	3	1
AUT	1121	Basic Braking System	1	3	2
			10	20	17
THIRD QUARTER					
		Related Course	3	0	3
AUT	1124	Fundamentals of the Automotive Power Train System	3	7	6
AUT	1123	Automotive Chassis & Suspensions	3	6	5
		Related Course	0	3	1
		Related Course	3	2	4
			12	18	19
FOURTH QUARTER					
AHR	1101	Automotive Air Conditioning	2	3	3
AUT	1125	Automotive Servicing	5	17	11
		Related Course	3	0	3
			10	20	17
FIFTH QUARTER					
AUT	1131	Brake Systems: Maintenance & Repair	3	10	7
AUT	1133	Front & Rear Wheel Alignment	2	6	4
PME	1132	Automotive Vacuum Pumps, Lines, and Wiring Diagrams	3	6	5
			8	22	16

AUTO MECHANICS

(continued)

SIXTH QUARTER

			Class	Lab	Credit Hrs.
AUT	1134	Maintenance of Smog Control Systems	1	4	3
PME	1135	Thermodynamic Testing & Rebuilding of Automotive Engines & Component Systems	3	17	9
PME	1136	Automotive Testing Equip & Machining Processes	1	4	3
			5	25	15

SEVENTH QUARTER

AUT	1137	Automotive Transmission & Hypoid Differential Rebuilding	5	15	8
AUT	1138	North Carolina Inspections Laws and Safety Regulations	3	2	4
AUT	1139	Job Estimating	3	2	4
			11	19	16

Related Courses Listed On Page 119.

AUTO MECHANICS

EVENING CURRICULUM BY QUARTERS

			Class	Lab	Credit Hrs.
FIRST QUARTER					
		Related Course	3	0	3
PME	1101A	Principles of the Internal Combustion Engine	3	9	6
			6	9	9
SECOND QUARTER					
		Realted Course	5	0	5
PME	1101B	Principles of the Internal Combustion Engine	2	8	5
			7	8	10
THIRD QUARTER					
AUT	1121	Basic Braking System	1	3	2
AFT	1101	Schematics and Diagrams: Power Mechanics	0	3	1
PME	1102A	Principles of the Engine Electrical and Fuel System	2	6	4
			3	12	7
FOURTH QUARTER					
		Related Course	5	0	5
PME	1102B	Principles of the Engine Electrical & Fuel Systems	2	8	5
			7	8	10
FIFTH QUARTER					
		Related Course	3	0	3
		Related Course	0	3	1
AUT	1123A	Automotive Chassis & Suspension	3	6	5
			6	9	9
SIXTH QUARTER					
AUT	1124B	Fundamentals of the Automotive Power Train System	3	7	6
		Related Course	3	2	4
			6	9	10
SEVENTH QUARTER					
AHR	1101	Automotive Air Conditioning	2	3	3
AUT	1125A	Automotive Servicing	3	7	6
			5	10	9
EIGHTH QUARTER					
AUT	1125B	Automotive Servicing	2	10	5
		Related Course	3	0	3
			5	10	8

Related Courses Listed On Page 119.

AUTO MECHANICS

Course Description

PME 1101 Fundamental Principles of the Internal Combustion Engine
This course will emphasize the basic fundamental principles of internal combustion engines. Studies will be made on engine design, engine construction, and engine operation. Emphasis will be placed on how design and construction affect operation and power production.
Prerequisite: None

PME 1102 Principles of the Engine Electrical and Fuel Systems
Knowledge of this system is most important to the Auto Mechanic. Electricity and magnetism are vital to starting, lighting, spark ignition, and other automotive operations. Studies of how Electrical and Fuel systems compliment each other will be made.
Prerequisite: None

DFT 1101 Schematics and Diagrams: Power Mechanics
Interpretation and reading of blueprints. Development of ability to read and interpret blueprints, charts, instruction and service manuals, and wiring diagrams. Information on the basic principles of lines, views, dimensioning procedures, and notes.
Prerequisite: None

AUT 1121 Basic Braking System
Basic brake requirements, types of brakes, energization, mechanical application, booster brakes, vacuum and air brakes, brake trouble shooting and special brake tools will all be studied in this course.
Prerequisite: None

AUT 1124 Fundamentals of the Automotive Power Train System
The Power Train System will be studied with special emphasis on transmissions. Clutch operated conventional transmissions, overdrive, automatic transmissions with fluid couplings, automatic transmissions with tongue converter are to be emphasized. Drive line, rear axle, and differential will also be studied.
Prerequisite: None

AUT 1123 Automotive Chassis and Suspensions
Principles and functions of the components of automotive chassis. Practical job instruction in adjusting and repairing of suspension, and steering systems. Units to be studied will be shock absorbers, springs, steering systems, steering linkage, and front end alignment.
Prerequisite: None

AHR 1101 Automotive Air Conditioning
General introduction to the principles of refrigeration; study of the assembly of the components and connections necessary in the mechanisms, the methods of operation, and control; proper handling of refrigerants in charging the system.
Prerequisite: None

AUT 1125 Automotive Servicing
Emphasis is on the shop procedures necessary in determining the nature of troubles developed in the various components systems of the automobile. Troubleshooting of automotive systems, providing a full range of experience in testing, adjusting, repairing, and replacing.
Prerequisite: None

AUT 1131 Brake Systems: Maintenance and Repair
Studies of master cylinders, dual master cylinders, wheel cylinders, steel lines, Budd disc brakes, General Motors and Ford disc brakes, self-adjusting, power and manual brakes will be made. Turning disc drums and brakes, flushing brake lines and bleeding the system as well as linkage adjustment will be taught. The maintenance and repair of all of these will be thoroughly studied.
Prerequisite: AUT 1121

AUT 1133 Front and Rear Wheel Alignment
Included in this course will be the replacing of upper and lower control arms, ball joints, tie rod ends, shock absorbers, coil springs, leaf springs, tension bars. Students will be taught to make necessary corrections on caster, camber, tow in, as well as balancing wheels and checking and adjusting front and rear wheel tracking.
Prerequisite: AUT 1123

PME 1132 Automotive Vacuum Pumps, Lines, and Wiring Diagrams
Students will study the systems of wiring and vacuum pumps in this course. Knowledge of the systems as well as diagnostic skills should be obtained from endeavor.
Prerequisite: DFT 1101

AUT 1134 Maintenance of Smog Control Systems
Modern automobiles are required by law to be equipped with smog control devices. The various kinds of devices and their maintenance will be studied by the Automotive student.
Prerequisite: PME 1102

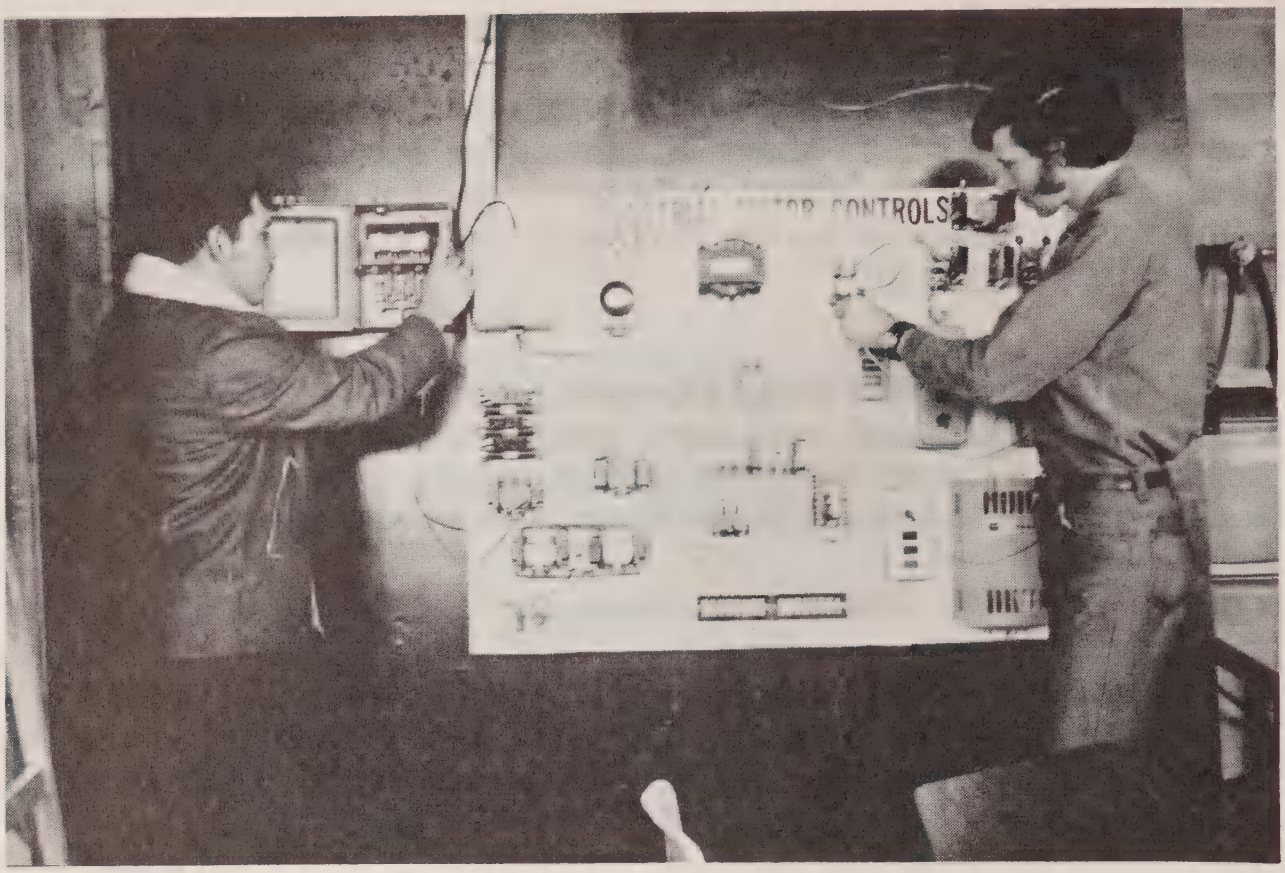
PME 1135 Thermodynamic Testing and Rebuilding of Automotive Engines and Component Systems
A thorough study of performance and diagnostic testing as well as complete engine rebuilding will be made in this course. The basic engine and all component systems that complete the power plant of an automobile will be completely investigated by the student.
Prerequisite: PME 1101

PME 1136 Automotive Testing Equipment and Machinery Processes
Testing equipment and machinery processes become more and more important with todays cars. The student will be trained on modern test equipment and machines to prepare him to be a contemporary automotive technician.
Prerequisite: PME 1101

AUT 1137 Automotive Transmission and Hypoid Differential Rebuilding
This course will emphasize the complete rebuilding of the automotive drive train system. The student will be thoroughly trained on the various kinds of transmissions and hypoid differentials.

AUT 1138 North Carolina Inspections Laws and Safety Regulations
The state of North Carolina has an annual automobile safety inspection law. This course will include the equipment that is inspected on autos as well as what the state requires of the mechanics that are authorized to perform safety inspections. Character and reputation as well as building and equipment required by the state are studied.
Prerequisite: None

AUT 1139 Job Estimating
The automobile owner is greatly concerned with the cost of repairs to be made. In this course, the student is to be taught how to make an estimated cost of parts, labor, and miscellaneous items that make up the total cost of a repair bill.
Prerequisite: None



ELECTRICAL INSTALLATION AND MAINTENANCE

The rapid expansion of the national economy and the increasing development of new electrical products is providing a growing need for qualified people to install and maintain electrical equipment. By mid-1960 more than 350,000 were employed as either construction electricians or maintenance electricians. It is expected that the total requirements for electrical tradesmen will reach 800,000 by 1980. The majority of the electrical tradesmen today are trained through apprenticeship or on-the-job training programs.

This curriculum guide will provide a training program in the basic knowledge, fundamentals, and practices involved in the electrical trades. A large portion of the program is devoted to laboratory and instruction which is designed to give the student practical knowledge and application experience in the fundamentals taught in class.

The graduate of the electrical trades program will be qualified to enter an electrical trade as an on-the-job trainee or apprentice, where he will assist in the planning, layout, installation, check out, and maintenance of systems in residential, commercial, or industrial plants. He will have an understanding of the fundamentals of the National Electrical Code regulations as related to wiring installations, electrical circuits, and the measurements of voltage, current, power, and power factor of single and polyphase alternating circuits. He will have a basic knowledge of motor and motor control systems; industrial electronic control systems; business procedures, organization, and practices; communicative skills; and the necessary background to be able to advance through experience and additional training through upgrading courses offered in the center.

ELECTRICAL INSTALLATION AND MAINTENANCE

Suggested Curriculum By Quarters

			Class	Lab	Credit Hrs.
FIRST QUARTER					
		Related Course	3	0	3
		Related Course	5	0	5
ELC	1123	Residential Wiring	5	14	9
DFT	1110	Blueprint Reading: Building Trades	0	3	1
			13	17	18
SECOND QUARTER					
		Related Course	5	0	5
ELC	1112	Direct & Alternating Currents	3	8	5
		Related Course	3	0	3
ELC	1124	Residential Wiring	3	8	5
			14	16	18
THIRD QUARTER					
ELC	1113	Electrical Machines & Controls	5	14	9
		Related Course	3	2	4
DFT	1113	Blueprint Reading: Electrical	0	3	1
		Related Course	0	3	1
			8	22	15
FOURTH QUARTER					
ELC	1125	Commercial & Industrial Wiring	5	10	8
		Related Course	3	0	3
ELN	1118	Industrial Electronics	3	9	6
			11	19	17

Related Courses Listed On Page 119.

ELECTRICAL INSTALLATION AND MAINTENANCE

Course Descriptions

ELC 1123 and ELC 1124 Residential Wiring
Provides instruction and application in the fundamentals of blueprint reading, planning, layout, and installation of wiring in residential applications, such as: services, switchboards, lighting, fusing, wire sizes, branch circuits, conduits, National Electrical Code regulations in actual building mock-ups.
Prerequisite: ELC 1113, and DFT 1110.

DFT 1110 Blueprint Reading: Building Trades
Principles of interpreting blueprints and trade specifications common to the building trades. Development of proficiency in making three-view and pictorial sketches.
Prerequisites: None

ELC 1112 Direct and Alternating Currents
A study of the electrical structure of matter and electron theory, the relationship between voltage, current, and resistance in series, parallel, and series-parallel circuits. An analysis of direct current circuits by Ohm's Law and Kirchoff's Law. A study of the sources of direct current voltage potentials. Fundamental concepts of alternating current flow, reactance, impedance, phase angle, power, and resonance. Analysis of alternating current circuits as it applies to Electrical Installation & Maintenance.

ELC 1113 Electrical Machines and Controls
Provides fundamental concepts in single and polyphase alternating current circuits voltages, currents, power measurements, transformers, and motors. Instruction in the use of electrical test instruments in circuit analysis. The basic concepts of AC and DC machines and simple system controls. An introduction to the type control used in small appliances such as: Thermostats, times, or sequencing switches.
Prerequisite: ELC 1112 and MAT 1115

DFT 1113 Blueprint Reading: Electrical
Interpretation of schematics, diagrams and blueprints applicable to electrical installations with emphasis on electrical plans for domestic and commercial buildings. Sketching schematics, diagrams, and electrical plans for electrical installations using appropriate symbols and notes according to the applicable codes will be a part of this course.
Prerequisite: DFT 1110

ELC 1125 Commercial and Industrial Wiring
Layout, planning and installation of wiring systems in commercial and industrial complexes, with emphasis upon blueprint reading and symbols, the related National Electrical Codes, and the application of the fundamentals to practical experience in wiring, conduit preparation, and installation of simple systems.
Prerequisites: ELN 1118 and ELC 1124

ELN 1118 Industrial Electronics
Basic theory, operating characterisitics, and application of vacuum tubes such as: diodes, triodes, tetrodes, pentodes, and gaseous control tubes. An introduction to amplifiers using triodes, power supplies using diodes, and other application.
Prerequisite: None

INDUSTRIAL MAINTENANCE

North Carolina, in its tremendous industrial growth, has the need for highly skilled personnel to maintain machines that are controlled by electrical and fluid power devices. This curriculum is designed to prepare students to repair and maintain machinery, electrical wiring and fixtures, and hydraulics and pneumatic devices found in industrial establishments. He uses blueprints and sketches, manuals and codes, and works with handtools made for electricians and machinists. He diagnoses causes of malfunctions in industrial machines. He sets up and operates machine tools such as the lathe, milling machine, and drill press to repair or make machine parts. He installs machine parts, starts machines, observes operation, and inspects the machine with test instruments.

An electromechanical serviceman may be required to install, maintain and service electrical and mechanical equipment. He should be able to follow directions from blueprints and sketches, use handtools, and metal-working machines, and check the work with measuring and testing instruments. He operates metalworking machines, such as the lathe, milling machine and drill press to make repairs. He uses the micrometer and calipers to verify dimensions. He assembles wires, insulation, and electrical components using handtools and soldering equipment. He tests electrical circuits and components to locate shorts, faulty connections, and defective parts, using tests meters. He also inspects and tests hydraulic equipment after new installations or repairs.

INDUSTRIAL MAINTENANCE

Suggested Curriculum By Quarters

			Class	Lab	Credit Hrs.
FIRST QUARTER					
ELC	1132	Direct and Alternating Currents	3	10	6
		Related Course	3	0	3
		Related Course	5	0	5
DFT	1104	Blueprint Reading: Mechanical	0	3	1
WLD	1104	Basic Welding and Cutting	0	6	2
			11	19	17
SECOND QUARTER					
ELC	1113	Alternating Current and Direct Current Machines and Controls	5	14	9
		Related Course	3	0	3
MEC	1140	Hydraulics - Fundamentals	1	2	2
		Related Course	5	0	5
			14	16	19
THIRD QUARTER					
MEC	1101	Machine Shop Theory and Practice	5	9	8
DFT	1113	Blueprint Reading: Electrical	0	3	1
MEC	1133	Electrical and Mechanical Maintenance	3	5	5
		Related Course	3	2	4
			11	19	18
FOURTH QUARTER					
MEC	1102	Machine Shop Theory and Practice	5	9	8
MEC	1134	Electrical and Mechanical Maintenance	5	8	8
		Related Course	3	0	3
			13	17	19

Related Courses Listed On Page 119.

INDUSTRIAL MAINTENANCE

Course Descriptions

ELC 1132 Direct and Alternating Currents
A study of the structure of matter and the electron theory, the relationship between voltage, current and resistance in series, parallel and series -parallel circuits. Analysis of direct current circuits by Ohm's Law and Kirchhoff's law; sources of direct current potentials. Fundamental concepts of alternating current flow; a study of reactance, impedance, phase angle, power and resonance and alternating current circuit analysis as it applies to Industrial Maintenance.

DFT 1104 Blueprint Reading: Mechanical
Interpretation and reading of blueprints. Information of the basic principles of the blueprint; lines, views, dimensioning procedures and notes.
Prerequisite: None

ELC 1113 Alternating Current & Direct Current Machines & Controls
Provides fundamental concepts in single and polyphase alternating current circuits, voltages, currents, power measurements, transformers, and motors. Instruction in the use of electrical test instruments in circuit analysis. The basic concepts of AC and DC machines and simple system controls. An introduction to the type control used in small appliances, such as: thermostats, timers, or sequencing switches.

MAT 1115 Electrical Mathematics
An introductory algebra course with trignometry and vectors needed in alternating current: algebraic operations of addition, subtraction, multiplication and division; use of letters and signs, grouping, factoring; exponents, ratios and proportions; algebraic and graphic solutions of first-degree equations; introduction to trigonometric functions, their graphs and applications to right triangles. Addition, subtraction and resolution of vector quantities.

MEC 1140 Hydraulics - Fundamentals
This course is arranged to give the student a general knowledge of the basic components of hydraulic systems, as well as a general understanding of the basic laws and formulas used in simple hydraulic calculations. Topics included are: the use of standard hydraulic symbols, pumps, control valves, control assemblies, actuators, and basic maintenance procedures.

MEC 1101 Machine Shop Theory and Practice
An introduction to the machinist trade and the potential it holds for the craftsman. Deals primarily with the identification, care and use of basic hand tools and precision measuring instruments. Elementary layout procedures and processes of lathe, drill press, grinding (off-hand) and milling machines will be introduced both in theory and practice.

MEC 1102 Machine Shop Theory and Practice
Advanced operations in layout tools and procedures, power sawing, drill press, surface grinder, milling machine and shaper. The student will be introduced to the basic operations on the cylindrical grinder and will select projects encompassing all the operations, tools and procedures thus far used and those to be stressed throughout the course.

BUS 1105 Industrial Organization
Methods, techniques, and practices of modern management in planning, organizing and controlling operations of manufacturing concern. Introduction to the competitive system and the factors constituting product cost.

DFT 1113 Blueprint Reading: Electrical
Advanced blueprint reading and sketching as it is related to detail and assembly drawings used in electrical shops.

MEC 1133 & MEC 1134 Electrical & Mechanical Maintenance
An introduction and continuation into the maintenance requirements of industrial electrical and mechanical equipment.

LICENSED PRACTICAL NURSE

The accelerated growth of population in North Carolina and rapid advancement in medical technology demand an increased number of well-trained personnel for health services. Realizing this need, the State Department of Community Colleges, in conjunction with local hospitals, adminsters programs of practical nurse education in local systems, community collges, technical institutes and in industrial education centers throughout the state.

The aim of the Practical Nurse Education Program is to make available to qualified persons the opportunity to prepare for participation in care of patients of all ages, in various states of dependency, and with a variety of illness conditions.

Students are selected on the basis of demonstrated aptitude for nursing as determined by pre-entrance tests, interviews with faculty members, high school record, character references, and reports of medical and dental examination.

Throughout the one-year program the student is expected to grow continuously in acquisition of knowledge and understandings related to nursing, the biological sciences, the social sciences and in skills related to nursing practice, communications, interpersonal relations, and use of good judgement. Evaluation of student performance consists of tests on all phases of course content, evaluation of clinical performance, and evaluation of adjustment to the responsibilities of nursing. A passing score of 80 is required on all graded work, plus demonstrated progress in application of nursing skills to actual patient care.

Graduates of accredited programs of practical nurse education are eligible to take the licensing examination given by the North Carolina Board of Nursing. This examination is given twice each year, usually in the spring and fall. A passing score entitles the individual to receive a license and to use a legal title "Licensed Practical Nurse." The license must be renewed annually. The Licensed Practical Nurse can apply for licensure in other states on the basis of a satisfactory examination score, without repeating the examination.

The LPN is prepared to function in a variety of situations: hospitals of all types, nursing homes, clinics, doctors' and dentists' offices and, in some localities, public health facilities. In all situations the LPN functions under supervision of a registered nurse and-or licensed physician. This supervision may be minimal in situations where the patient's condition is stable and not complex; or it may consist of continuous direction in situations requiring the knowledge and skills of the registered nurse or physician. In the latter situation, the LPN may function in an assisting role in order to avoid assuming responsibility beyond that for which the one-year program can prepare the individual.

Job requirements for the Licensed Practical Nurse include suitable personal characteristics, ability to adapt knowledge and understandings or nursing principles to a variety of situations, technical skills for performance of bedside nursing, appreciation for differences of people and for the worth of every individual, a desire to serve and help others, and readiness to conform to the requirements of nursing ethics and hospital policies.

LICENSED PRACTICAL NURSE

MASTER PLAN OF INSTRUCTION

		Class Hrs.	Lab Hrs.
FIRST QUARTER			
UNIT I	Introduction to Nursing	2	2 hrs. each day first quarter
UNIT II	History of Nursing	5	
UNIT III	Understanding Self and Others	20	
UNIT IV	Health: Personal, Physical and Mental Family: Community	40	
UNIT V	The Patients' Environment	5	
UNIT VI	Needs of Dependant Patient	5	
UNIT VII	Observing and Recording	10	
UNIT VIII	Basic Science:		
	A. Anatomy-Body Structure & Function	70	
	B. Basic Nutrition - Special Diets for Specific Conditions	45	
	C. Microbiology	20	
UNIT IX	Review of Basic Math - For Drugs and Solutions in Second Quarter	10	
SECOND QUARTER			
UNIT I	Common Medical-Surgical Conditions	33	6 hrs. per week
UNIT II	Introduction to Maternity Nursing	33	
UNIT III	Introduction to Pediatrics and Nursing Care of Sick Child	33	
UNIT IV	Introduction to Pharmacology Therapeutic Methods	33	(16 clinical hrs. per week)
THIRD QUARTER			
UNIT I	Common Medical - Surgical Conditions	44	(24 clinical hrs. per week)
UNIT II	Pediatrics - Care of Subacutely Ill Child	44	
UNIT III	O. B. Needs of Maternity Patients with Complications and New Borns with Common Disorders	44	
UNIT IV	Pharmacology-Giving of Oral Medication	44	
FOURTH QUARTER			
UNIT I	Med-Surg. - Needs of Seriously Ill Patient	44	(24 clinical hrs. per week)
UNIT II	O. B. - Complex Situations in Maternity Nursing-Labor-Delivery	44	
UNIT III	Administration of Drugs "By Injection"	22	
UNIT IV	Needs of Patient in Immediate Post Operative Period	22	
UNIT V	Pediatrics - Needs of Seriously Ill Child	44	
UNIT VI	The Practical Nurse in Community Disaster (First Aide)	11	
UNIT VII	Assuming the Role of Graduate Practical Nurse - Also Legal Aspects of Nursing, Nursing Organizations	11	

LICENSED PRACTICAL NURSING

Course Descriptions

Practical Nursing I

Objectives: To assist beginning students in practical nursing to acquire basic knowledge from nursing and from related areas of learning and to begin to develop the skills needed for safe and effective bedside care of patients whose health deviation has created a state of dependency in matters of daily living.

Course Material:
Nursing-History; introduction to patient care.
Health-Personal, physical and mental; family; community.
Basic Science-Body structure and function; bacteriology; basic nutrition.

Vocational Adjustments-Introduction to ethics and legal aspects of nursing.

Communications and Human Relations.
Classroom activities are planned to assist students in development of knowledge, understanding appreciations, and attitudes basic to effective nursing of patients of all ages and backgrounds with nursing needs arising both from the individuality of the patient and from inability for self-care as a result of a health deviation. The student is encouraged to develop beginning skills in analysis of patient needs, both through classroom study of hypothetical patient situations and through planned patient experiences in the clinical environment. Beginning skills in nursing methods are developed through planned laboratory experiences, followed by related practice in actual patient care.

Clinical activities provide introduction to actual patient care through selected clinical assignments requiring application of current classroom and laboratory learnings.

Prerequisite: Admission requirements

Practical Nursing II
Objectives: To assist practical nursing students to acquire further knowledge and understanding and to develop further skills needed for rendering safe and effective nursing care to patients of all ages.

Course Material:
Medical-Surgical Nursing--Patient care; therapeutic methods, including administration of oral medication

Introduction to Maternity Nursing.

Introduction to Nursing the Sick Child.

Communications and Human Relations.

Classroom activities center around analysis of nursing needs as viewed in perspective with the needs arising from the individuality of the patient and from the illness condition. Related information is presented as it is relevant to the student's understanding of and ability to meet nursing needs of patients.

Clinical activities provide selected experiences in patient care in order for the student to develop skill in applying classroom learnings to a variety of patient situations.

Prerequisite: Practical Nursing I

Practical Nursing III
Objectives: To assist practical nursing students to acquire knowledge of common disease conditions and to develop beginning skills in rendering safe and effective nursing care to patients of all ages with specific needs arising from the illness and-or therapy.

Course Material:

Common Medical-Surgical Conditions.

Care of the Subacutely-Ill Child.

Care of Maternity Patient and Newborn Infant with Complications.

Classroom activities center around analysis of nursing needs arising from the specific illness condition and the medical plan.

Clinical activities consist of guided experiences in nursing patients with conditions which illustrate classroom learnings.

Prerequisite: Practical Nursing II

Practical Nursing IV
Objectives: To assist advanced practical nursing students to acquire knowledge of needs of patients who are seriously ill, to develop beginning skills in assisting the registered nurse and-or physician in complex nursing situation, and to make the transition to the role of graduate practical nurse.

Course Material:

Needs of the Seriously-Ill Patient.

Needs of Patients in Immediate Post-Operative Period.

Needs of the Labor Patient.

Needs of the Seriously-Ill Child

Assuming the Role of Graduate Practical Nurse

Classroom activities center around the needs of seriously-ill patients of all ages, of labor patients, and of patients immediately following surgery.

Clinical activities consist of guided experiences in the care of seriously-ill patients, labor patients, and surgery patients, and is planned to parallel classroom learnings whenever possible.

Prerequisite: Practical Nursing III

LIGHT CONSTRUCTION

Our world population is growing continuously. The construction industry is hard pressed to meet the needs of this rapidly expanding population.

The Light Construction student is exposed to the various aspects of basic construction. General Masonry is approached so that the graduate will have an understanding of the various uses of masonry in construction from the ground up.

Carpentry is covered thoroughly from rough framing to cabinet making and trim work. A well equipped woodworking shop is provided so that students gain experience with a wide range of woodworking machinery.

Electrical and mechanical installations are covered so that students are made aware of the problems of several trades working together to build a finished structure.

The students are exposed to a variety of related subjects such as math, blueprint reading, specifications, estimating and small business operations.

LIGHT CONSTRUCTION

			Class	Lab	Credit Hrs.
FIRST QUARTER					
ENG	1101	Terminology and Vocabulary	3	0	3
		Related Course	5	0	5
DFT	1110	Blueprint Reading: Building Trades	3	0	3
MAS	1101	General Masonry	5	14	9
			16	14	20
SECOND QUARTER					
CAR	1101	Carpentry I	5	14	9
DFT	1111	Blueprint Reading & Sketching	3	0	3
		Related Course	5	0	5
		Related Course	3	0	3
			16	14	20
THIRD QUARTER					
CAR	1102	Carpentry II	5	10	8
ELC	1120	Basic Electrical Ins. & Maintenance	1	3	2
PUL	1115	Plumbing Installations	1	3	2
DFT	1145	Estimating, Specifications & Contracts	2	0	2
		Related Course	3	2	4
			12	18	18
FOURTH QUARTER					
CAR	1103	Carpentry III	5	17	10
MEC	1136	Mechanical Installation	1	4	2
		Related Course	3	0	3
			9	21	15

Related Courses Listed On Page 119.

LIGHT CONSTRUCTION

Course Descriptions

DFT 1110 Blueprint Reading-Building Trades
Principles of interpreting blueprints and trade specifications common to the building trades. Development of proficiency in making three view and pictorial sketches.
Prerequisite: None

MAS 1101 General Masonry
Layout and erection of reinforced grouted brickmasonry lintels, fireplaces glazed tile, panels, decorative stone, granite, marble, adhesive terra cotta and modular masonry construction theory and techniques.
Prerequisite: None

DFT 1111 Blueprint Reading & Sketching
Principles of interpreting blueprints and specifications common to the building trades. Practice in reading details for grades, foundations, walls, elevations, chimneys, fireplaces, arches, and cavity wall construction. Development of proficiency in making three view and pictorial sketches.

CAR 1101A Carpentry I
A brief history of carpentry and the present trends of the construction industry. The course will involve operation, care and safe use of carpenter's hand tools and power tools in cutting, shaping, and joining construction materials used in carpentry work.

CAR 1101B Carpentry II
Major topics in study will include theoretical and practical applications involving materials and methods of construction, building layout, preparation of site, footings and foundation wall construction including form construction and erection.
Prerequisite: CAR 1101A

DFT 1145 Specification & Contracts
The purpose and writings of specifications will be studied along with their legal and practical application to working drawings. Contract documents will be analyzed and studied for the purpose of client-architect contractor responsibilities, duties and mutual protection.
Prerequisite: DFT 1111

PLU 1115 Plumbing Installations
The students are introduced to the tools, fittings, and equipment used by plumbers. They spend considerable time learning to handle these materials and tools correctly by: cutting pipe, threading, caulking, and sweating joints of the various kinds of pipe and tubing. Plumbing installations are made to provide practical applications. Heating devices, the storage and circulation of hot water will be studied. The student will receive practice in the installation of various plumbing fixtures and the proper use of traps. Field trips should be taken to study various types of installations.
Prerequisite: None

MEC 1136 Mechanical Installation
The building mechanic is known as a general handyman or utility repairman. He needs the tools of the several trades to install and adjust mechanical equipment such as air conditioning and heating, connect electrical motors and switches. He maintains floor work, brick and plaster walls, windows, doors and maintains locks, plumbing and other hardware.
Prerequisite: None

CAR 1101C Residential & Commercial Construction
The use of modern materials and their application in todays building steel, wood, and plastic finishes, color combinations, comparisons, and the uses of these materials and processes in the job site. Field trips to see the actual materials being used should be taken.
Prerequisite: CAR 1101B

ELC 1120 Basic Electrical Installation & Maintenance
Provides basic instruction and application in blueprint reading, the planning, location, layout, and installation of wiring and fixtures in all types of light construction settings as well as the necessary maintenance for its safe and efficient operation.

POTTERY PRODUCTION

Each student is given the opportunity to learn throwing, handbuilding, glazing and firing. Another part of the course includes recognizing different clay bodies and clay conditioning. Field trips are made to the clay deposits in the area where some students dig their own clay.

This course is set up for beginners as well as experienced potters. It is for the student who chooses Pottery for a hobby and for the individual who would like to become a professional potter and open his own shop.

The studio operates an electric kiln for bisque firing and oil fired kiln for stoneware and a counter balance drop Raku kiln.

POTTERY PRODUCTION

Suggested Curriculum By Quarters

			Class	Lab	Credit Hrs.
FIRST QUARTER					
CER	1001	Pottery I Ceramic Materials, Procedures, and Techniques	9	18	15
SECOND QUARTER					
CER	1002	Pottery II Ceramic Materials, Procedures, and Techniques	7	18	13
CER	1005	Pottery Practicum I	0	15	2
			7	33	15
THIRD QUARTER					
CER	1003	Pottery III Ceramic Materials, Procedures, and Techniques	7	18	13
CER	1006	Pottery Practicum II	0	15	2
			7	33	15
FOURTH QUARTER					
CER	1004	Pottery IV Advanced Ceramic Materials, Glaze Theory, Calculations and Kiln Design	7	18	13
CER	1007	Pottery Practicum III	0	15	2
			7	33	15

POTTERY PRODUCTION

Course Descriptions

CER 1001 Pottery I-Ceramic Materials, Procedures, & Techniques
Fundamentals of the preparation and use of clay. Methods of fabrication from hand building to wheel-thrown wares. Mold-making, slip casting, and jiggering; ceramic sculpture and decorative techniques. Chemistry and application of glazes which include intensive exploration of surface variation and enrichment use of Raku low and medium temperature glazes. Stacking and firing of kilns. The organization of the ceramic shop, with planning for efficient production.

CER 1002 Pottery II-Ceramic Materials, Procedures, & Techniques
Intensive work on individual clay and glaze problems. Work at the potter's wheel to produce pieces with harmonious fusion of form, design and finish. Ceramic raw materials and sources of supply are studied. Colored slips, underglaze, majolicer, sprig molding, glaze treatments, medium and high temperature glazes, and clays are used. Experience in clay preparation, kiln stacking and observation of firing procedures.

CER 1003 Pottery III-Ceramic Materials, Procedures, & Techniques
Problems of maintenance and construction of equipment. Summary of kiln types, fuels, and construction. Materials and sources of supplies. Development of bodies and glazes for specific purposes. Problems requiring new uses, adaptations, and applications.

CER 1004 Pottery IV-Advanced Ceramic Materials, Glaze Theory, Calculations and Kiln Design
A broad study of glaze structure and color, the preparation of glaze stains and the diagnosis of correction of glaze faults throughout the available temperature range. Also included is a study of the scientific theories of the structure of mattter and ceramic processes from clay-water systems to glasses and glazes. Cost estimates and designs for one or more kilns will be evolved through orthographic projection, detailed working drawings, and materials specification skills.

CER 1005, CER 1006, CER 1007-Pottery Practicum
The objective of this course is to provide the student-before graduation from Pottery Making-a working practice in an environment in which he will experience after graduation and upon employment. This period of time will enable the student to use the equipment and perform the processes and services required of his specialty under close supervision and with responsibilities commensurate with his capabilities. The cooperative work experience period will be carefully planned and closely supervised by both the educational institution where the student is enrolled and the agency or business where the student is involved in cooperative experience. An official agreement among the educational institution, the student, and the agency or business will provide for a programmed sequence of activities to be performed by the student with supervisory responsibilities for the educational elements of the work clearly defined.

RADIO AND TELEVISION SERVICING

This program at MTI offers training in the knowledge and skills you need for installation, maintenance and servicing of radios, televisions and sound amplifier systems.

Students will learn electronic principles and service techniques by actual practice in a laboratory.

The Radio & Television Servicing Program will prepare you to establish your own business maintain an inventory and meet the public in the repair shop & on service calls.

RADIO AND TELEVISION SERVICING

Day Curriculum By Quarters

FIRST QUARTER

			Class	Lab	Credit Hrs.
		Related Course	2	0	2
		Related Course	5	0	5
ELC	1122	Direct & Alternating Currents	9	14	14
			16	14	21

SECOND QUARTER

		Related Course	5	0	5
		Related Course	3	0	3
ELN	1122	Vacuum Tubes & Circuits	4	8	7
ELN	1126	Transistor Theory & Circuits	4	6	6
			16	14	21

THIRD QUARTER

		Related Course	3	2	4
ELN	1128	Transistor Theory & Circuits	3	4	4
ELN	1125	Radio Receiver Servicing	3	6	5
ELN	1127	Television Receiver Circuits and Servicing	3	6	5
			12	18	18

FOURTH QUARTER

		Related Course	3	0	3
ELN	1131	Color Television Receiver Service	10	17	16
			13	17	19

Related Courses Listed On Page 119.

RADIO AND TELEVISION SERVICING

Evening Curriculum By Quarters

			Class	Lab	Credit Hrs.
FIRST QUARTER					
ELC	1122A	Direct and Alternating Currents	5	8	8
ENG	1101	Terminology and Vocabulary	2	0	2
			7	8	10
SECOND QUARTER					
ELC	1122B	Direct and Alternating Currents	4	6	6
		Related Course	5	0	5
			9	6	11
THIRD QUARTER					
ELN	1122	Vacuum Tubes and Circuits	4	8	7
		Related Course	3	0	3
			7	8	10
FOURTH QUARTER					
		Related Course	5	0	5
ELN	1126	Transistor Theory and Circuits	4	6	6
			9	6	11
FIFTH QUARTER					
		Related Course	3	2	4
ELN	1128	Transistor Theory & Circuits	3	4	4
ELN	1125A	Radio Receiver Servicing	1	2	2
			7	8	10
SIXTH QUARTER					
ELN	1125B	Radio Receiver Servicing	2	4	3
ELN	1127	Television Receiver Circuits & Servicing	3	6	5
			5	10	8
SEVENTH QUARTER					
ELN	1131A	Color Television Receiver Servicing	5	10	9
			5	10	9
EIGHTH QUARTER					
ELN	1131B	Color Television Receiver Servicing	5	7	7
		Related Course	3	0	3
			8	7	10

Related Courses Listed On Page 119.

RADIO AND TELEVISION SERVICING

Course Descriptions

ELC 1122 Direct and Alternating Currents
A study of the structure of matter and the electron theory, the relationship between voltage, current and resistance in series, parallel and series-parallel circuits. Analysis of direct current circuits by Ohm's law and Kirchoff's law; sources of direct current potentials. Fundamental concepts of alternating current flow; a study of reactance, impedance, phase angle, power and resonance and alternating current circuit analysis as it applies to Radio & TV Servicing.
Prerequisite: None

ELN 1122 Vacuum Tubes and Circuits
An introduction to vacuum tubes and their development; the theory, characteristics, and operation of vacuum diodes, semi-conductor diodes, rectifier circuits, triodes, and simple voltage amplifier circuits.
Prerequisite: ELC 1112

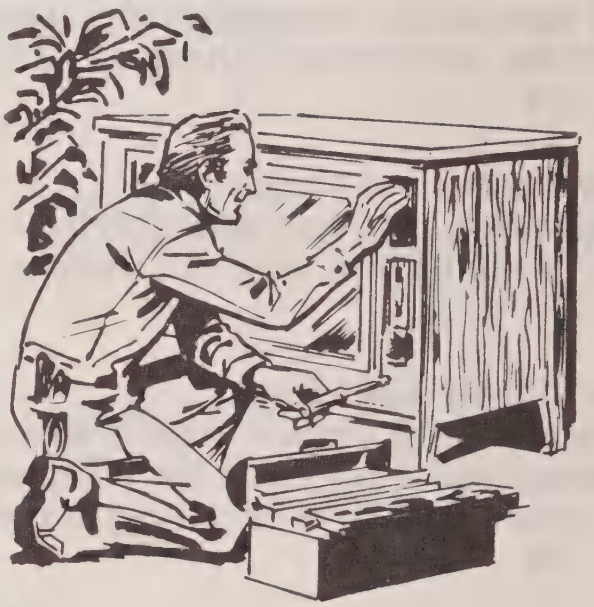
ELN 1126 Transistor Theory and Circuits
Transistor theory, operation, characteristics and their application to audio and radio frequency amplifier and oscillator circuits.
Prerequisite: None

ELN 1128 Transistor Theory and Circuits
Emphasis will be placed on techniques of trouble shooting and repair of TV receivers with the proper use of assocated test equipment. This course will be primarily based upon application of principles previously studied.
Prerequisite: ELN 1126

ELN 1125 Radio Receiver Servicing
Principles of radio reception and practices of servicing; included are block diagrams of radio receivers, servicing techniques of AM and FM receivers by resistance measurements, signal injection, voltage and analysis, oscilloscope methods of locating faulty stages and components and the alignment of AM and FM receivers.
Prerequisite: ELC 1112 and ELN 1122

ELN 1127 Television Receiver Circuits and Servicing
A study of principles of television receivers, alignment of radio and intermediate frequency amplifiers, adjustment of horizontal and vertical sweep circuits will be taught. Techniques of troubleshooting and repair of TV receivers with the proper use of associated test equipment will be stressed. Additional study of more specialized servicing techniques and oscilloscope waveform analysis will be used in the adjustment, troubleshooting and repair of the color television circuits.
Prerequisite: None

ELN 1131 Color Television Receiver Service
A broad servicing course including troubleshooting, radios, television, record players, sound systems, and other electronic communication devices. Major emphasis will be placed upon studying colored television principles and theories. The service and repair of colored television sets will be included for laboratory work.
Prerequisite: ELN 1127



SHEET METAL SPECIALIST

Within the next decade numerous employees will be required for replacements in the sheet metal industry, not counting the many now needed for the expanding air conditioning industry.

The content of this program is designed to give the student a sound foundation in sheet metal layout, a knowledge of metals, various methods and adequate practice in fabrication.

The sheet metal workers and layout draftsmen are involved in an industry that is centered around construction and manufacturing. Workers install ducts which are used in ventilating, air conditioning, tobacco processing plants, and other systems requiring movement of air. They also fabricate and install roofing, siding, flashing, venting, commercial stainless steel kitchen equipment, cabinets, partitions, store fronts, metal framework for advertising signs, and structures used for material movement and collection.

SHEET METAL SPECIALIST

Suggested Curriculum By Quarters

			Class	Lab	Credit Hrs.
FIRST QUARTER					
MEC	1141	Sheet Metal I	5	16	10
		Related Course	5	0	5
MEC	1124	Measurement & Layout	1	3	2
			11	19	17
SECOND QUARTER					
MEC	1142	Sheet Metal II	5	17	10
		Related Course	5	0	5
DFT	1118	Blueprint Reading	0	3	1
			10	20	16
THIRD QUARTER					
MEC	1143	Sheet Metal III	5	17	10
		Related Course	3	0	3
		Related Course	3	2	4
			11	19	17
FOURTH QUARTER					
MEC	1144	Sheet Metal IV	5	19	11
		Related Course	3	0	3
WLD	1108	Welding Processes	0	3	1
			8	22	15

Related Courses Listed On Page 119.

SHEET METAL SPECIALIST

Course Descriptions

MEC 1141 Sheet Metal I
This course is designed to equip the sheet metal worker with the necessary technical knowledge to allow the trainee to become proficient in principles and practices of sheet metal layout and fabrication. The related mathematics, blueprint reading, sketching, drawing of layouts, and the using of the tools of the trade are corelated in planning and producing the basic projects. Surface development methods of prisms and other geometrical objects by the parallel line method are used to develop the projects. Spray painting of various production finishes is taught along with the different methods of corrosion prevention by using protective coatings.
Prerequisite: None

MEC 1124 Measurement & Layout
A basic course that covers measuring and layout tools common to the metal industries; principles of orthographic projection; parallel and radial methods of development and their application to layout work; and the measurement and layout of edges, seams, and notches. Step-by-step procedures for the development of patterns; for intersections of cylinders; rectangular and round tanks, etc.
Prerequisite: None

MEC 1142 Sheet Metal II
A comprehensive knowledge of the principles of radial line development is obtained through this course. Drawings and fabrication of various fittings are made by using the round pipe parallel line development method, various conical objects using radial line method, and transition pieces using triangulation method. A brief written description of the procedure used in laying out and fabricating the fitting is necessary. Miscellaneous sheet metal fittings are developed and made in the shop. Weather caps, suction hook-ups, dust collectors and various ventilation systems are examples of these principles. Applied mathematics is used in determining the areas, volumes of air and other problems.
Prerequisite: MEC 1141

MAT 1101B Fundamentals of Math
Plane and solid geometric figures using industrial applications: measurement of surfaces and volumes. Introductions to algebra using formulas applicable to the building trades. Practice in depth using related problems.
Prerequisite: MAT 1101A

MEC 1143 Sheet Metal III
A study is made of working drawings, detailing, and layout for domestic and commercial installations; projects and fittings for exhaust, blow-pipe, and refuse collecting systems; the application of sheet metal formulas are used in determining the area and volume of various fittings and projects. A thorough understanding of the principles of triangulation, the method used to lay out patterns of irregular objects is developed. Skill in pattern development is acquired through the layout methods used for a variety of fittings and objects to be made in the shop, such as square-to-rounds, Y-branches, shoe tees, dust collectors, fume hoods and other transitions.
Prerequisite: MEC 1142

AHR 1123 Principles of Air Conditioning
Work includes the selection of various heating, cooling and ventilating systems, investigation and control of factors affecting air cleaning, movement, temperature, and humidity. Use is made of psychrometric charts in determining needs to produce optimum temperature and humidity control. Commercial air conditioning equipment is assembled and tested. Practical sizing and balancing of ductwork is performed as needed.
Prerequisite: MEC 1141, MEC 1142

MAT 1130 Sheet Metal Math
This course covers mathematical principles and concepts, along with selected related problems, in the general field of sheet metal. The mathematical areas covered include: linear, angular, area and volume measure; common and decimal fractions; formulas; equations and graphs.
Prerequisite: MAT 1101A

MEC 1144 Sheet Metal IV
An advanced study is made by developing working drawings and layout patterns for intricate articles, fittings, and projects in all branches of sheet metal work. Projects such as, rectangular-to-round double offset, psychrometric processes and charts, elbows, boots, estimating for air conditioning, such as cooling and heating loads. A brief description of the procedure used in laying out or estimating the problems is required when these layouts are made and when short cuts are stressed in developing skills that save time, materials, and effort.
Prerequisite: MEC 1143

WLD 1108 Welding Processes
A course offering instruction in the principles and processes of fastening or joining various sheet metals by welding. Techniques and trade terms are learned. The welding of sheetmetal materials such as aluminum, stainless steel and copper by the inert gas and spot welding methods are practiced.
Prerequisite: None

SMALL ENGINES AND EQUIPMENT REPAIR

The one year program in Small Engines and Equipment Repair will study the theory and operating principles of small engines as well as servicing and repairing single and multicycle engines.

Upon completion of this curriculum, graduates may find employment in the area of sales, service, distribution, installation and maintenance.

The knowledge and use of practical skills will be explored in these various engines: lawn mowers, tractors, boat motors, mini-bikes and motorcycles.

SMALL ENGINES AND EQUIPMENT REPAIR

Day Curriculum By Quarters

			Class	Lab	Credit Hrs.
FIRST QUARTER					
PME	1101A	Theory & Components of the Internal Combustion Engine	6	15	11
		Related Course	3	2	4
		Related Course	0	3	1
			9	20	16
SECOND QUARTER					
PME	1126	Small Engine Servicing	8	18	14
		Related Course	0	4	1
			8	22	15
THIRD QUARTER					
PME	1127	Lawn Mower & Garden Tractor Drives, Suspensions, Brakes and Hydraulics	5	22	12
		Related Course	3	0	3
			8	22	15
FOURTH QUARTER					
PME	1128	Motorcycle Mechanics	5	22	12
		Related Course	3	0	3
			8	22	15

Related Courses Listed On Page 119.

SMALL ENGINES AND EQUIPMENT REPAIR

Evening Curriculum By Quarters

			Class	Lab	Credit Hrs.
FIRST QUARTER					
PME	1101A	Theory and components of the Internal Combustion Engine	3	9	6
		Related Course	0	3	1
			3	12	7
SECOND QUARTER					
PME	1101B	Theory and components of the Internal combustion Engine	3	7	5
		Related Course	3	2	4
			6	9	9
THIRD QUARTER					
PME	1126A	Small Engine Servicing	4	7	6
		Related Course	0	4	1
			4	11	7
FOURTH QUARTER					
PME	1126B	Small Engine Servicing	4	11	8
			4	11	8
FIFTH QUARTER					
PME	1127A	Lawn Mower & Garden Tractor Drives, Suspensions, Brakes and Hydraulics	3	12	7
			3	12	7
SIXTH QUARTER					
		Related Course	3	0	3
PME	1127B	Lawn Mower and Garden Tractor, Drives, Suspensions, Brakes, and Hydraulics	2	10	5
			5	10	8
SEVENTH QUARTER					
PME	1128A	Motorcycle Mechanics	3	12	7
			3	12	7
EIGHTH QUARTER					
PME	1128A	Motorcycle Mechanics	2	10	5
		Related Course	3	0	3
			5	10	8

Related Courses Listed On Page 119.

SMALL ENGINES AND EQUIPMENT REPAIR

Course Descriptions

PME 1101A Theory and Components of the Internal Combustion Engine
Emphasis is on the single cylinder, air-cooled engine. A study of the theory of internal combustion engines, this course will include such considerations as: (1) the systems for ignition, fueling, cooling, lubrication, and their coordination; (2) the practical application of gas laws; (3) the actual component parts of systems; and (4) considerations of precision in engine parts. Both two-cycle and four-cycle engines will be considered. Specific application to lawn mowers, garden tractors, outboard motors, and motorcycles will be taught. Practical laboratory experience is included.
Prerequisite: None

PME 1126 Small Engine Servicing
A major emphasis is the actual "hands on" experience with real machinery. Theory is applied to the processes of mechanical disassembly, systematic diagnosis of problems, and recognition of defective parts, and routine servicing. Safety instruction precedes all other and continues throughout the course. Live, defective machinery provides the bulk of laboratory experiences. The major proportion of time will be spent servicing lawn mowers, garden tractors, outboard engines, and chain saws. Special classroom attention is given to the cranking and charging systems unique to small engines in which the starter also serves as a generator.
Prerequisite: None

WLD 1102 Introduction to Electrical Welding
This course is a continued development of basic knowledge and welding skills essential to the mechanic. Instruction is designed to acquaint the student with arc welding, MIG welding, and TIG welding equipment and processes. Opportunity is provided for skill development in the use of these processes and equipment in application involving a variety of methods used in joining metals of various types.
Prerequisite: None

PME 1127 Lawn Mower and Garden Tractor Drives, Suspension, Brakes and Hydraulics
This course will introduce students to the drives, brakes and suspensions systems unique to riding lawn mowers and garden tractors. A complete study will be stressed. Hydraulic systems as they occur in garden tractors will be studied in theory and practice.
Prerequisite: None

PME 1128 Motorcycle Mechanics
A thorough knowledge of internal combustions engines is required for this course in motorcycle mechanics. Motorcycles, motor-scooters and mini-bikes will be studied in great detail. Ignition, fuel, lubrication, braking, suspension, and drive systems for motorcycles will be studied. Practical application of the theory learned earlier is the keystone.
Prerequisite: None

UPHOLSTERY INTRODUCTION

The field of Upholstery is ever expanding. The constantly changing designs in home furnishing makes it necessary for increased numbers of qualified upholsterers to be available. Also, the field of Automobile upholstery and re-upholsterers is growing rapidly. Attempts are made to give students practical experience on furniture and automobiles. These experiences should be closely related to actual job experiences. This training is an ideal way to prepare students for entry into an occupation that offers many job opportunities.

UPHOLSTERY

Suggested Curriculum By Quarters

			Class	Lab	Credit Hrs.
FIRST QUARTER					
ENG	1101	Terminology & Vocabulary	3	0	3
		Related Subject	5	0	5
UPH	1101	Principles of Upholstery	3	12	7
UPH	1102	Furniture Construction	2	5	3
			13	17	18
SECOND QUARTER					
		Related Subject	5	0	5
UPH	1103	Automobile Seats	2	10	5
UPH	1104	Automobile Trim	3	10	6
			10	20	16
THIRD QUARTER					
		Related Subject	3	0	3
		Related Subject	3	2	4
UPH	1105	Design & Fabric Coordination	5	0	5
UPH	1106	Upholstery Practicum	0	17	5
			11	19	17
FOURTH QUARTER					
		Related Subject	3	0	3
UPH	1107	Upholstery Practicum	0	16	5
UPH	1108	Automotive Practicum	0	11	4
			3	27	12

UPHOLSTERY

COURSE DESCRIPTION

FIRST QUARTER
ENG 1101 Terminology and Vocabulary
Related Subject.

UPH 1101 Principles of Upholstery
The objective of this course is to familarize the student with the basic principles of upholstered furniture. This includes the types of materials used such as; Webbing, Springs, Edging, Twines and Filling, that should be used to bet the desired quality, looks, comfort and duriability in the finished product.

UPH 1102 Furniture Construction
This course is designed so that the student may have a working knowledge of the entire procedure of furniture construction. From the frame to the finished product which includes; frame construction and repair, finishing and touch-up, measuring and cutting fabric, sewing, applying the right amount of filler and upholstering covers to frame.

SECOND QUARTER
Related Subjects.

UPH 1103 Automobile Seats
This course consists of measuring and cutting covers for automotive seat repair. The student will gain a knowledge of how to restore seats to the original look or customize if preferred.

UPH 1104 Automotive Trim
This course is designed to give the student a skill in restoring and replacing of Head lines, door panels and carpets in automotive vehicles. Both original and customizing.

THIRD QUARTER
Related Subjects.

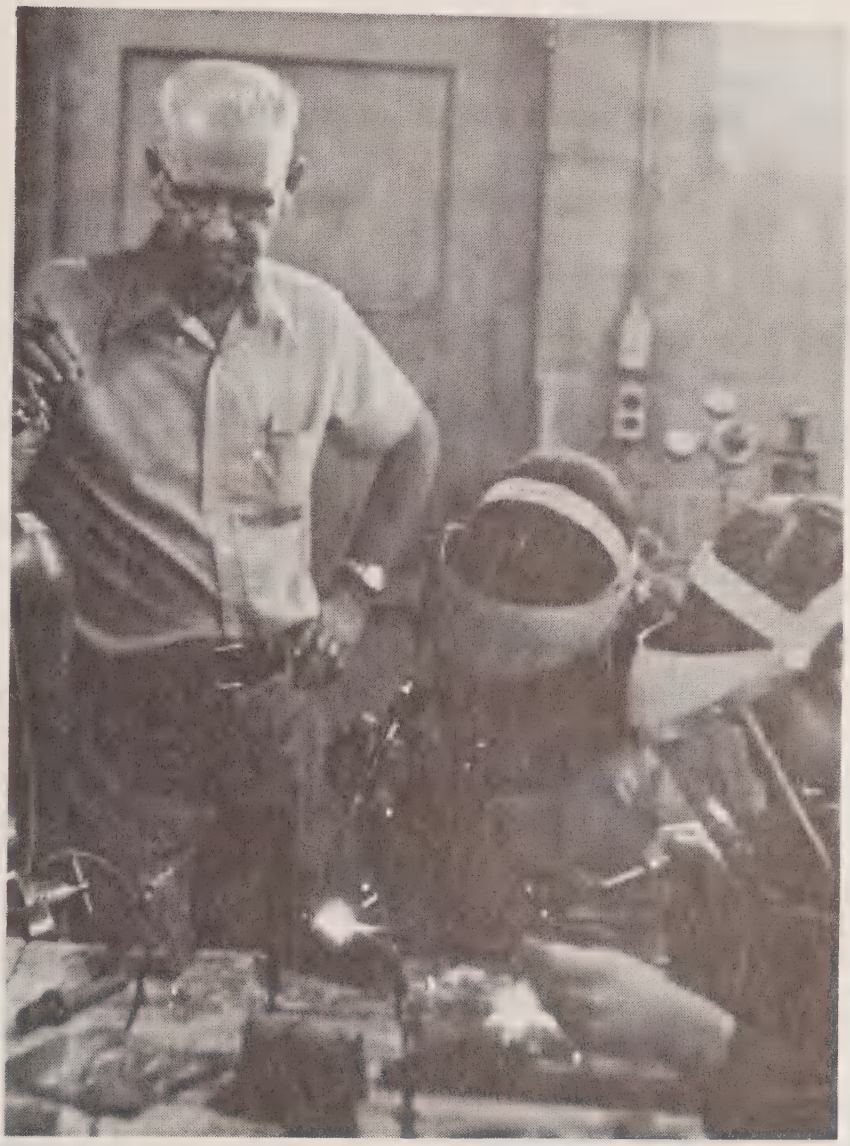
UPH 1105 Design & Fabric Coordination
This course gives the student an understanding of fabric quality and cost. The student will also gain a knowledge of what fabric will be best suited for a particular style of furniture.

UPH 1106 Upholstery Practicum
The objective of this course is to provide the student a working practice in an environment in which he will experience upon employment. This period of time will enable the student to use the tools and equipment to the fullest of his capabilities. The student will be encouraged to use his or her own creative abilities in constructing a finished product.

FOURTH QUARTER
Related Subjects.

UPH 1107 Upholstery Practicum
Continuation of 1106

UPH 1108 Automotive Practicum
Continuation of 1106



WELDING

Introduction

Welding is the joining of metals by heating them to the melting point, and allowing the molten portions to fuse or flow together. This four-quarter program consists of thirty hours per week devoted to classroom instruction and shop practice learning to use the basic machines and practicing the joining of metals in the various shapes and positions. Students spend time on oxyacetylene, electric arc, and the shielded arc machines.

In addition, ten hours per week of classroom instruction are spent on developmental subjects. This provides the student an opportunity to improve his reading ability, spelling, basic communicative skills, fundamental operations in mathematics, personal habits, and human relations.

After completing this program the student should become employed as a beginning welder such as a tacker or a flat welder. He may be classified as a beginning apprentice.

WELDING

Suggested Curriculum By Quarters

			Class	Lab	Credit Hrs.
FIRST QUARTER					
WLD	1120	Oxyacetylene Welding and Cutting	5	14	8
		Related Course	5	0	5
DFT	1104	Blueprint Reading: Mechanical	0	3	1
		Related Course	3	0	3
			13	17	17
SECOND QUARTER					
WLD	1121	Arc Welding	5	15	8
DFT	1117	Blueprint Reading: Welding	0	2	1
		Related Course	5	0	5
		Related Course	3	0	3
			13	17	17
THIRD QUARTER					
WLD	1124	Pipe Welding	3	11	7
WLD	1123	Inert Gas Welding	1	3	2
WLD	1112	Mechanical Testing & Inspection	1	3	2
DFT	1118	Pattern Development and Sketching	0	3	1
		Related Course	3	2	4
			8	22	16
FOURTH QUARTER					
WLD	1122	Commercial and Industrial Practices	3	9	6
WLD	1125	Certification Practices	3	6	5
MEC	1112	Machine Shop Processes	0	6	2
		Related Course	3	0	3
			9	21	16

Related Courses Listed On Page 119.

WELDING

Course Descriptions

WLD 1120 Oxyacetylene Welding and Cutting
Introduction to the history of oxyacetylene welding, the principles of welding and cutting, nomenclature of the equipment, assembly of unit. Welding procedures such as practice of puddling and carrying the puddle, running flat beads, butt welding in the flat, vertical and overhead positions, brazing, hard and soft soldering. Safety procedures are stressed throughout the program of instruction.

DFT 1104 Blueprint Reading: Mechanical
Interpretation and reading of blueprints. Information on the basic principles of the blueprint: lines, views, dimensioning procedures and notes.

WLD 1121 Arc Welding
An operation of A.C. transformers and D.C. motor generator arc welding sets. Studies are made of welding heats, polarities, and electrodes for use in joining various metal alloys by the arc welding process. After the student is capable of running beads, butt and fillet welds in all positions are made and tested in order that the student may detect his weakness in welding. Safety procedures are emphasized throughout the course.

WLD 1123 Inert Gas Welding
Introduction and practical operations in the use of inert-gas-shield arc welding. A study will be made of the equipment, operation, safety and practice in the various positions. A thorough study of such topics as: principles of operation, shielding gases, filler rods, process variations and applications, manual and automatic welding.

WLD 1112 Mechanical Testing and Inspection
The standard methods for mechanical testing of welds. The student is introduced to the various types of tests and testing procedures and performs the details of the test which will give adequate information as to the quality of the weld. Types of tests to be covered are: Destructive-guided free-bend, notched-bend, tee-bend, trepannining, nick-tear, tension and impact: Non-Destructive-visual, red dye penetrant, etching, hydraulic, pneumatic, hydrostatic, boroscopic, radiograph, gamma ray, post-heating, magnetic particle, halide, haolgen, cladding and magnaflux.

MEC 1112 Machine Shop Processes
To acquaint the student with the procedures of layout work and the correct use of hand and machine tools. Experiences in the basic fundamentals of drill press and lathe operation: hand grinding of drill bits and lathe tools: set-up work applied to the trade.

BUS 1105 Industrial Organizations
Methods, techniques, and practices of modern management in planning, organizing, and controlling operations of a manufacturing concern. Introduction to the competitive system and the factors constituting product cost.

MAT 1103 Geometry
An introduction into the study of Geometry. The importance of the basic properties of the triangle, circle, prism, cylinder, pyramid, cone, frustum, and sphere, and their problem solving application.

DFT 1117 Blueprint Reading: Welding
Advanced blueprint reading and sketching as related to detail and assembly drawings used in welding shops.

DFT 1118 Pattern Development and Sketching
Instruction is given in the selection, use, and care of instruments, single stroke lettering, applied geometry, freehand sketching and pictorial drawings.

WLD 1122 Commercial and Industrial Practices
Instruction is given in the various areas of commercial and industrial welding. Particular attention is given to manufacturing processes.

WLD 1124 Pipe Welding
Advanced welding practices are studied with regard to making the various kinds of joints and seams.

WLD 1125 Certification Practices
Instruction is provided the student that will enable him to perform the many welding tasks necessary in becoming a certified welder.

RELATED COURSES FOR VOCATIONAL CURRICULUMS

			Class	Lab	Credit Hrs.
MAT	1101	Fundamentals of Math	5	0	5
MAT	1102	The Metric System	5	0	5
PHY	1101	Applied Science	3	2	4
PHY	1102	Applied Science	3	2	4
ENG	1101	Terminology and Vocabulary	2	0	2
ENG	1102	Communications Skills	3	0	3
ENG	1103	Public Relations	3	0	3
ENG	1104	Reading Improvement	2	0	2
PSY	1101	Human Relations	3	0	3
PSY	1111	Seminar in Personal Development	3	0	3
ECO	1102	Economics	5	0	5
POL	1104	Governmental Structure	3	0	3
BUS	1102	Beginning Typing	2	3	3
BUS	1103	Small Business Operations	3	0	3
BUS	1106	Business Law	3	0	3
BUS	1107	Taxes	3	0	3
BUS	1108	Bookkeeping Skills	5	0	5
WLD	1101	Basic Gas Welding	0	3	1
WLD	1102	Tig Welding	0	3	1

RELATED COURSES

Course Descriptions

MAT 1101 Fundamentals of Math
Practical number theory. Analysis of basic operations: addition, subtraction, multiplication, and division. Fractions, decimals, powers and roots, percentages, ratio and proportion. Plane and solid geometric figures used in industry: measurement of surfaces and volumes. Introduction to algebra used in trades. Practice in depth.
Prerequisite: None

MAT 1102 The Metric System
This will be a thorough study of the metric system. All of the various symbols and terms as well as weights, sizes, and measurements will be taught.

PHY 1101 Applied Science
An introduction to physical principles and their application in industry. Topics in this course include measurement, properties of solids, liquids and gases, basic electrical principles.
Prerequisite: None

PHY 1102 Applied Science
The second in a series of two courses of applied physical principles. Topics introduced in this course are heat and thermometry, and principles of force, motion, work, energy, and power.

ENG 1101 Terminology and Vocabulary
This course is designed to familiarize the student with the terminology and vocabulary of the industry involved. The parts and systems as well as tools and equipment used in servicing will be taught. The student should develop a sufficient vocabulary for effective communication with others in the industry.

ENG 1102 Communications Skills
Designed to promote effective communication through correct language usage in speaking and writing.
Prerequisite: None

ENG 1103 Public Relations
An exposure to newspaper, radio, and other forms of advertising and promotion media to the potential small business owner. Effective usage of these media will be explored.

ENG 1104 Reading Improvement
A concentrated effort to improve the student's ability to comprehend what he reads by training him to read more rapidly and accurately. Special machines are used for class drill to broaden the span of recognition, to

increase eye coordination and word group recognition, and to train for comprehension in larger units. Reading faults of the individual are analyzed for improvement, and principles of vocabulary building are stressed.

PSY 1101 Human Relations
A study of basic principles of human behavior. The problems of the individual are studied in relation to society, group membership, and relationships within the work situation.

PSY 1111 Seminar in Personal Development
An overriding purpose governs this course: A Human Services specialist must have a thorough knowledge of self and his self-concept before his actions can be effective in helping other people. The seminar in Personal Development will include instructional activities which bring about self-awareness: (1) in communications, (2) of self-identity, (3) of group identity, (4) of self-behavior, and (5) of group behavior. The majority of instruction is in the form of group activities.
Prerequisite: None

ECO 1102 Economics
The fundamental principles of economics including the institutions and practices by which people gain a livelihood. Included is a study of the laws of supply and demand and the principles bearing upon production, exchange, distribution, and consumption both in relation to the individual enterprise and to society at large.

POL 1104 Governmental Structure
A serious study of negotiating social organizations and their bureaucracies with special emphasis on obtaining services for clients. Study will necessarily include a basic introduction to management of organizations and how those principles relate to the sociology of governmental structure.

BUS 1102 Beginning Typing
An introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts.
Prerequisite: None

BUS 1103 Small Business Operations
An introduction to the business world, problems of small business operation, basic business law, business forms and records, financial problems, ordering and inventorying, layout of equipment and offices, methods of improving business, and employer-employee relation.
Prerequisite: None

BUS 1106 Business Law
A general course designed to acquaint the student with certain fundamentals and principles of business law, including contract, negotiable instruments and agencies.
Prerequisite: None

BUS 1107 Taxes
Application of federal and state taxes to various businesses and business conditions. A study of the following taxes: income, intangible personal property, license taxes, sales and use, excise, estate and inheritance, gifts and franchise.

BUS 1108 Bookkeeping Skills
Principles, techniques and tools of accounting, for understanding of the mechanics of accounting -- collecting, summarizing, analyzing, and reporting information about service and merchantiles enterprises, to include practical application of the principles learned.

WLD 1101 Basic Gas Welding
Welding demonstrations by the instructor and practice by students in the welding shop. Safe and correct methods of assembling and operating the welding equipment. Practice will be given for surface welding, bronze welding, silver soldering, and flame cutting methods applicable to mechanical repair work.
Prerequisite: None

WLD 1102 Tig Welding & Cutting
Welding demonstrations by the instructor and practice by students in the welding shop. Safe and correct methods of assembling and operating the welding equipment. Practice will be given for surface welding and flame cutting. Emphasis on electric arc and gas welding methods applicable to mechanical repair work. Bronze welding and silver soldering may also be covered.

TECHNICAL SPECIALTY PROGRAMS

NURSES' ASSISTANT

PRACTICAL

STRUCTURAL MACHINIST

UPHOLSTERY

GENERAL INFORMATION . . .

CERTIFICATE:

Upon Completion Of The 330 Hours And The Attainment Of The Required Skills, The Student Is Awarded The Technical Specialty Certificate.

ADMISSION:

Anyone 18 Years Old Or Older May Be Admitted To The Technical Specialty Programs.

NURSES' ASSISTANT

The purpose of the Nurses' Assistant program is to help the student develop an awareness of the scope of the health field and a beginning understanding of health facilities, modern nursing, and the role of the Nurses' Assistant. The student will develop understanding of common effects of illness of patient, family, and the community, and beginning skills in helping patients adjust to illness and/or hospitalization. The student will make a reliable observation of patients and proper reporting procedures to appropriate personnel.

Other topics are medical asepois, safety, emergency situations, nursing procedures, performing unsterile irrigations and simple therapeutic measures, and needs of surgical patients. Finally, the course should help the student make the transition to a fully-responsible employee role, fulfill citizenship responsibilities as a wage-earner, and set personal standards for quality performance as a member of the nursing team.

Course Outline

Unit I: Introduction to Role of the Nurses' Assistant
- Lesson 1: Trends in Nursing
- Lesson 2: Modern Health
- Lesson 3: Modern Nursing
- Lesson 4: The Nurses' Assistant Today

Unit II: Understanding Effects of Illness
- Lesson 1: Common Effects of Illness
- Lesson 2: Common Reactions to Hospitalization
- Lesson 3: Aiding Adjustment to Illness and-or Hospitalization

Unit III: Making Observations on Patients
- Lesson 1: How to Make Reliable Observations
- Lesson 2: How to Observe Respiratory and Circulatory Function
- Lesson 3: How to Measure Body Temperature
- Lesson 4: How to Observe Body Specimens
- Lesson 5: General Observations to be Reported

Unit IV: Safety Measures in Care of the Sick
- Lesson 1: Medical Aspects
- Lesson 2: Fundamentals of Safety in Patient Care
- Lesson 3: Internal Disaster
- Lesson 4: External Disaster

Unit V: Measures to Promote the Patient's Comfort
- Lesson 1: Care of the Patient's Unit
- Lesson 2: Assisting the Patient with Personal Hygiene
- Lesson 3: Maintaining the Patient's Body Function
- Lesson 4: Diversional Activities

Unit VI: Measures Related to the Patient's Illness
- Lesson 1: Care of the Patient in Isolation
- Lesson 2: Irrigations
- Lesson 3: Heat and Cold
- Lesson 4: Procedures Related to the Surgical Patient

Unit VII: Becoming a Hospital Employee
- Lesson 1: Being a Responsible Wage Earner
- Lesson 2: Applying for and Resigning from a Position
- Lesson 3: Maintaining High Standards

ADMISSION

A Candidate for the Nurses' Assistant Program:

1. Should be at least 18 and not more than 55 years of age, although applicants over 55 who show above average promise will be considered for admission.
2. Should have completed at least four units of high school work, although applicants with less education will be considered on the basis of individual merit.
3. Must submit a transcript of high school and post-high school education.
4. Must demonstrate aptitudes for nursing. The applicant is required to take one standardized test to determine overall mental ability.
5. Must submit to the required application forms.
6. Must be in acceptable condition of physical and mental health as determined by prescribed medical and dental examination.
7. Must have a personal interview with designated school representative.
8. Must possess the interest and character appropriate for success as a nurses' assistant.
9. Should like to work with and be able to get along well with people.
10. Should possess manual skills to an acceptable degree.

TIME REQUIRED

The student will spend six hours a day, five days a week, in classroom and ward performance.

PRACTICAL STRUCTURAL MACHINIST

A structural machinist is a valuable worker in the small metal construction shop. He (or she) can weld with the electric arc, with gasses, and with the heliarc welder. He can also operate metal machining tools such as the lathe, the shaper, the horizontal and vertical mills, and the surface grinder. Essentially, the structural machinist is able to construct items from metal which are contracted to a job shop. Instruction includes mostly laboratory work in welding and metal machining. After classroom work in basic safety, metal-working principles and machine operation, students learn by actual practical projects. These projects include repair of broken metal items and construction of new articles ranging from goal posts to simple dies for an arbor press.

A total of 330 classroom hours are required for a full quarter's credit. At the end of one quarter's work, a student can begin work in a job shop with basic welding skills, a basic knowledge of metal characteristics, and basic machine operation skills.

At the end of four quarters' work, a student will be ready for a machinist's apprentice position -- or a relatively skilled position in a job shop.

ONE QUARTER			Class	Lab	Credit Hrs.
MEC	1100	Machine Shop	0	8	4
WLD	1120	Welding Practices	0	17	10
EDU	1026	General Studies	5	0	5
			5	25	19

UPHOLSTERY

The technical specialty graduate in upholstering will be prepared to apprentice himself in an upholstering production plant. In the 330 hours session, the upholstering student becomes familiar with the fundamentals of layout, cutting, sewing, knock-up, spring-up, insiding, and outsiding. The student develops skills in only two or three of the areas according to his interest and ability.

Each upholstered furniture producer operates its own styles and variations. For that reason, one quarter training will prepare a student to master a particular employer's styles more quickly than his untrained counterpart could. Each graduate will necessarily undergo an orientation-training program in whatever job he accepts.

Training takes place mostly in the laboratory. The student does learn many of the important fundamentals of design and materials in the classroom. His training time, however, is primarily spent on practical construction of furniture. In the practical instruction, a student learns to use the modern tools of the trade. He also learns to work on modern furniture designs.

ONE QUARTER

	Class	Lab	Credit Hrs.
Upholstery	5	25	15

CONTINUING EDUCATION

PURPOSE

PROGRAM AREAS

GENERAL INFORMATION

Admission
Fees
Certificates
Class Locations
Class Formation
Enrollment
Community Services

PROGRAMS

Hospitality Education
Law Enforcement Training
Distributive Occupational Education
General Occupational Education
General Adult Education
New And Expanding Industry Training
Management Development Training
Fire Service Training
Adult Basic Education Program
Adult High School Program
The High School Equivalency Program (GED)
Handicapped And Disadvantaged Program
Human Resources Development Program
Individualized Instruction Center
School Of Information

CONTINUING EDUCATION

Purpose

Education is a process that continues throughout an individual's life. The recent rapid developments in technology have made it imperative that individuals make purposeful plans in order that they might keep abreast of these developments both in the societal and physical changes that have taken place. It is the Institute's aim to afford every individual in Montgomery County the opportunity to develop to his fullest potential in whatever areas of vocational and cultural endeavor that he desires.

PROGRAM AREAS

"Your Imagination Is The Only Limit"

GENERAL INTEREST	OCCUPATIONAL UPGRADING	SPECIAL OCCUPATIONAL
Adult Basic Education	In-plant or In-class	Management
Adult High School	Such as:	Development
Art	Blueprint Reading	Hospitality Education
Sewing	Textile Dyeing	Firemanship Education-
Interior Decorating	Basic Electricity	Law Enforcement
Bricklaying	Knitter-Fixer Training	New & Expanding
Speed Reading	Power Sewing Operator	Industries
Decoupage	Sewing Machine Fixer	
ABC Shorthand		

Other courses are added in direct response to the interests and needs of those we serve.

GENERAL INFORMATION

Admission

Any adult who has reached the age of eighteen (18) and is not enrolled in public school is eligible to enroll.

Fees

A small fee is charged for adult education classes. Such fees, when charged, are due and payable at the third class session. Books and supplies are available through the Institute bookstore. When classes meet at community centers, the Institute's bookstore makes it possible for books to be purchased at the community center.

Certificates and Diplomas

Certificates are awarded students meeting requirements for any of the classes and programs for adults. Adult Education High School Diplomas are awarded to adults satisfactorily completing requirements in the High School Program. These diplomas are presented by the local school board of the county or city in which the student resides.

Class Locations

A number of adult classes are held on the Institute campus. Classes are also conducted in any community of the Montgomery Technical Institute service area whenever a sufficient number of students have indicated an interest.

Class Formation

Generally, classes in Continuing Education are established on a demand basis. Different program areas have different requirements for number of students cost, and places to meet. Course offerings will reflect the needs and interests of the citizens. This means that Montgomery Technical Institute counts on its public to request courses. At times, courses will be announced which need additional students. If you desire a course which has not been announced, contact the Extension Department of Montgomery Technical Institute. Your cooperation in recruiting a group of your friends and neighbors for a course is appreciated.

Enrollment

For an adult to enroll in a class, he can follow either of two procedures: (1) Simply show up for an announced class and take a chance on the class being filled, or (2) pre-register by telephone with the secretary to the Director of Extension and assure himself of a place in the class.

Community Services

Montgomery Technical Institute facilities are available for the use of community-based groups. These groups are scheduled at a time which does not conflict with class schedules.

HOSPITALITY EDUCATION

The hospitality industry is the third largest industry in North Carolina and affords many employment opportunities to the people of this state. Training is provided for personnel in the motel, restaurant, service station, hospital, retail businesses and recreation services, including such subject areas as:

Sales Promotion
Food and Beverage Management and Service
Maintenance and Engineering
Front Office Procedure
Service Station Attendant Training

LAW ENFORCEMENT TRAINING

Leaders in law enforcement have felt the need for more nearly uniform training for many years. This program is designed to meet that need in such a way that departments of all sizes can participate. MTI is certified by the N.C. Criminal Justice Training and Standards Council.

DISTRIBUTIVE OCCUPATIONAL EDUCATION

A continuing need for better trained retail and wholesale personnel is another area in which the Division offers opportunity for training. Some of the subject areas are:

Business Management
Marketing Research
Shop-lifting Prevention
Customer Relations

GENERAL OCCUPATIONAL EDUCATION

In addition to the specialized offerings, M.T.I. can offer a wide variety of occupational preparation and upgrading courses. The limit is simply what people need and want to learn. Of particular significance for Montgomery County are:

Basic Chemistry for Textiles
Electrical Code
Textiles, General
The Framing Square

This list, however, is only suggestive. Any person desiring some course should call M.T.I. and express the desire. Any industry desiring an up-grading or pre-training course should contact the Director of Extension at M.T.I. Courses will usually be tailormade to the situation. Instructors will be agreed upon by all parties concerned.

GENERAL ADULT EDUCATION

Most adults have areas of specialized interest to them which they would like to pursue. Whatever the limits of human interests are is the limit of General Adult Education. Courses in Flower Arranging, Interior Decorating, Bricklaying and the Kentucky Rifle Making are some of the most popular. Any adult with an interest who wishes to pursue that interest in an organized manner is encouraged to call MTI and ask for a course.

Other possibilities are:

Adult Driver Education
Art
Ceramics
Speed-Reading
Speed-Writing

But, these are only a few.

NEW AND EXPANDING INDUSTRY TRAINING

Operated in conjunction with the Department of Conservation and Development, this program is intended to encourage new industries to locate and older industries to expand in a particular area. Services offered are:

1. Consultation in determining job descriptions; defining areas of training; and in prescribing appropriate course outlines, training schedules and materials.
2. Selecting and training of instructors. These instructors may be recruited from the company and from outside sources.
3. Payment of instructor's wages for the duration of the training program.
4. Provision of suitable space for a temporary training facility prior to the completion of the new plant, should such temporary space be required. This may be space with Montgomery Technical Institute or leased space in the community.
5. Assumption of installation costs of equipment in the temporary training facility.
6. Payment for one-half the cost of non-salvageable materials expended in the training program.

MANAGEMENT DEVELOPMENT TRAINING

This program is designed to provide instruction for supervisors at various levels of management. Subjects include such areas as human relations, communications, job methods, job analysis, time and motion studies, etc.

FIRE SERVICE TRAINING

The growing Piedmont area of North Carolina requires expansion of fire-fighting units and continuous upgrading of fire-fighting personnel. Courses to train fire service personnel in the latest techniques and methods of fire-fighting are provided. The Fire Service Training Program provides training sessions in local fire departments. This allows the men to be trained as an organized group utilizing equipment that they would ordinarily use in controlling fires.

Fire Service classes include the following areas of study and others:

Forcible Entry
Ladder Practices
Salvage and Overhaul Practices
Fire Apparatus Practices
Rescue Practices
Protective Breathing Equipment

ADULT BASIC EDUCATION

The primary purpose of the Adult Basic Education (ABE) program at Montgomery Technical Institute is to provide literacy, consumer, and social educational opportunities for all adults eighteen (18) years of age or older to develop these abilities to the level they desire.

The ABE emphasis at MTI is on consumerism. The philosophy of the ABE curriculum is that "the 3 R's" can best be taught in terms and methods used by the students. Also included in the major program areas will be social studies and science programs, crafts, and implementation of standard materials to improve the reading, writing, and mathematical capabilities of the ABE students.

Adult Basic Education classes are offered in the five major communities in Montgomery County. ABE classes run from the first of September to the end of May. These courses are taught by qualified instructors from the local community and held two nights a week for a total of six hours per week. Any adult can enter into the program at any time during the year. There is no cost for the ABE program.

Montgomery Technical Institute will assist any interested organization or group of individuals in setting up any new ABE classes. Wherever there is sufficient interest, MTI will establish an ABE class.

An adult may obtain additional information or enroll by one of the following methods: (1) come by MTI, (2) telephone the Adult Basic Education Director, or (3) show up for the announced class.

ADULT HIGH SCHOOL

The Adult High School Diploma Program is operated in cooperation with the Montgomery County Board of Education. In order to qualify for the Adult High School Diploma, students must receive credit for courses in Grammar, Literature, Mathematics, U.S. History, Social Science, Biology, and Natural Science. Credits are given for previous high school courses passed in these areas. Any adult who has reached the age of eighteen (18) and is not enrolled in a public school is eligible to attend high school classes. Graduation exercises are held each August for those who have successfully completed the Adult High School Diploma requirements during the previous school year.

The Adult High School Diploma can be achieved by either attending night classes or through individualized instruction day or night in the Learning Lab. Both are located on the main campus at MTI. Course requirements for completion of the diploma in both areas are identical.

The night classes on Monday through Thursday nights from seven o'clock to ten o'clock p.m. are taught by qualified instructors from the local community. New classes begin approximately the first of September, February, and June. Students are required to pay a $2 registration fee in addition to the cost of books.

The Individualized Instructional Center is open from eight a.m. to ten p.m. Monday through Thursday and eight a.m. through five p.m. on Fridays to students who wish to use this area to complete their high school education. As opposed to the night classroom format, the Instructional Center courses are based on individualized instruction and may be entered at any time during the year. In this area, the student progresses at his own rate, depending upon his educational background and abilities.

An adult may obtain additional information or enroll by one of the following methods: (1) come by MTI, (2) telephone the high school director, or (3) show up for the announced class.

THE HIGH SCHOOL EQUIVALENCY PROGRAM

GED TEST

What is the High School Equivalency Program?

It is a program whereby an adult who did not complete his high school education may take a series of tests to demonstrate his general educational competence and be awarded a certificate recognized and generally accepted as equivalent to a high school diploma.

Who issues the Equivalency Certificate?

The equivalency certificate is issued by the N.C. State Board of Education and mailed directly to the recipient. The equivalency certificate is not issued by the local board of education or by a high school.

What is the value of a high school equivalency certificate?

The certificate is recognized almost without exception by industry, agencies of the government, employers, colleges, and other organizations and institutions as the legal equivalent of a diploma from an accredited high school. The certificate means that the holder has achieved a level of general educational development comparable to that of high school graduates.

What do the tests cover?

The tests known as the Test of General Educational Development (GED) are designed to measure a person's knowledge and skill in five areas:

Test one measures ability to use correct and effective English in written expression.

Test two, three and four measure ability to read, understand and interpret material in social studies, natural science, and literature respectively.

Test five measures the ability to solve problems in mathematics.

Where does a person apply for the certificate?

Application forms are available in the office of the local superintendent of schools or at MTI.

HANDICAPPED AND DISADVANTAGED PROGRAM

Montgomery Technical Institute has a great interest in the needs and problems of handicapped people and the institute has a special program to aid people who have physical, mental or emotional disabilities. Through this program, educational placement, job placement, counseling and referrals to a variety of other agencies can be provided.

HUMAN RESOURCES DEVELOPMENT PROGRAM

Human Resources Development training has been started at Montgomery Technical Institute to aid people who have trouble getting or keeping a job and who have educational deficiencies.

MTI offers eight week HRD classes featuring training in self-motivation and the skills needed to apply for a job, as well as providing students an opportunity to work toward their GED or adult high school diploma.

After completion of the course the HRD staff will assist students with job placement, educational placement or counseling.

INDIVIDUALIZED INSTRUCTION CENTER

A special feature of the division of continuing education at MTI is the Individualized Instruction Center or learning laboratory. This center has the capability of providing individualized educational experiences at a convenient time, based on a careful examination of student needs. An analysis of these needs is made and personalized learning activities are planned that will assist the students in reaching their stated goals.

Instruction is primarily through a study of programmed materials organized and designed especially for self-study. These materials are supplemented by tutoring and audio-tutorial activities in a variety of subject matter areas.

Students study materials that are challenging, on step, and compatible with their interest, special attributes and learning styles in a relaxed and supportive climate.

Vocational and Technical preparation courses are offered for those students who have completed their high school requirements, but still feel a need for special assistance before entering a curriculum program.

The Center further offers an opportunity to complete the requirements for an adult high school diploma for those students who find it difficult to attend the Adult High School classes at night.

Through the Center provisions are made for GED preparation and the adminstration of the GED test.

A variety of vocational courses are available for those individuals wishing to study for personal enrichment or fun.

Curriculum students seeking to overcome academic problems and/or enhance their potential for excelling in their chosen field will also find assistance in the Center.

Up-to-date listening programs designed to motivate and build confidence are available to all students.

In short, the Individualized Instruction Center provides a dynamic and comprehensive adult education in miniature.

LIBRARY

The library is open Monday through Thursday from 8:00 a.m. to 10:00 p.m. and on Friday from 8:00 a.m. to 5:00 p.m. The number of books in the library is adequate, but it is growing rapidly. You'll find that the card catalog will enable you to find any book needed. Books are checked out for a two-week period. Audio-visual materials are also checked out through the library. Orientation to proper library usage is conducted during the first two weeks of the fall quarter and at any other time by appointment with the librarian. A professionally trained librarian is available to assist you.

THE SCHOOL OF INFORMATION

Classes are designed primarily for adults who are unemployed, employed only part-time, retired, disabled, or school drop-outs. The class is so named because a wide variety of information is brought to these individuals from many sources to make life a little more pleasant for them. For example, the Extension office, the Health department, the department of Social Services, the Social Security office, Community Action, and many other agencies work very closely with the classes.

The five different classes meet once a week from 9 a.m. until 12 noon in five different communities, and they engage in many activities. Films and slides are shown to them; they are taught many crafts; consumer education is a very vital part of the classes; sewing, crocheting, and knitting are thoroughly enjoyed; homemaking techniques and proper diets are also taught; proper gardening techniques and other phases of horticulture are very helpful aspects; and the classes are taken on tours to places of interest in the area and out of the county.

MONTGOMERY TECHNICAL INSTITUTE
P. O. Drawer 487
Troy, North Carolina 27371

APPLICATION FOR ADMISSION

CURRICULUM APPLIED FOR _____

DATE YOU WISH TO ENTER				
	Fall 19___ Winter 19___	[ ] FULL TIME	[ ] DAY
	Spring 19___ Summer 19___	[ ] PART TIME	[ ] EVENING

1. _____ Age _____
LAST NAME (Print or type) FIRST NAME MIDDLE NAME
Sex _____

Race			
W	B	Ind	Oth

2. Social Security NO.

3. Home Address (Permanent Mailing Address) _____
NUMBER AND STREET

_____ _____ _____
CITY STATE ZIP COUNTY TELEPHONE

4. Birthdate _____ Birthplace _____
MONTH DAY YEAR CITY STATE

5. Will you and/or your parents have been legal resident(s) of the State of North Carolina for twelve (12) months immediately preceding the date on which you intend to enroll at MTI?

YES _____ NO _____

6.

FAMILY DATA	[ ] Father or [ ] Guardian	[ ] Mother (Maiden name) [ ] or Guardian	[ ] Husband [ ] Wife (if married)
Full Name (If deceased, write DECEASED in space)			
Occupation			
Present Mailing Address			

7.

EDUCATIONAL DATA	Name and Location	Dates of Attendance	Enter Highest Grade Completed
Last High School*			
Last College Attended			
Trade or Vocational School			

*Or did you pass the High School Equivalency Test? ___YES ___NO
If Yes, give Certificate Number _____
Name and Location of Testing Center _____

8.

EMPLOYMENT DATA	Name and Location	Occupation	Years Employed
Present Employer			
Previous Employer (Last place worked)			

9. Are you a Veteran? _____ YES _____ NO Branch of Service _____

Date of Discharge _____

10. Indicate your financial status

_____ Partial financial aid required
_____ Total financial aid required
_____ No financial aid required

Financial aid applications must be requested and filled out separately from this application. NO financial aid application will be processed until you have been accepted by this Institute.

11.

REFERENCES	Name	Address
(List 3)		
Do not list Parents or Immediate Relatives		

I understand that the information furnished on this application is true to the best of my knowledge, and that knowing falsification of information may result in disciplinary action or dismissal from school.

_____
SIGNATURE OF APPLICANT

_____
DATE

NOTE: Ask each high school or college attended to send an up-to-date transcript of your record to the Director of Student Services.

FOR STUDENT SERVICES USE ONLY	
In-State tuition rates apply	_____
Out-of-State tuition rates apply	_____